ปฏิบัติการที่ X VLC Streaming

ติดตั้งโปรแกรม VLC media player

ดาวโหลดและติดตั้งโปรแกรม

1. ดาวโหลดโปรแกรมที่เว็บไซต์ http://www.videolan.org/vlc/download-windows.html



- O X 🕢 💭 🕫 🕨 Computer 🔸 Local Disk (C:) 🔸 Users 🔸 Master 🔸 Downloads ✓ ⁴→ Search Downloads Q Organize 🔻 Include in library
 Share with
 New folder • ? Name Date modified Type Size ★ Favorites 📥 vlc-2.2.4-win32 📃 Desktop 28/11/2559 21:07 Application 29,819 KB \rm Downloads E Recent Places 词 Libraries Documents 🁌 Music Pictures Videos 🝓 Homegroup 👰 Computer 🚢 Local Disk (C:) **Network** 🖳 LENOVO MASTER-PC PC1 VBOXSVR 1 item
- 2. เมื่อดาวโหลดเสร็จให้ไปที่เก็บไฟล์ และดับเบิลคลิก

เลือกภาษาอังกฤษ และคลิกปุ่ม

Installer La	anguage 🔀
4	Please select a language.
	English 💌
	OK Cancel



🛓 VLC media player Setup		X
Choose Components Choose which features of VL	C media player you want to install.	A
Check the components you w install. Click Next to continue	vant to install and uncheck the components	you don't want to
Select the type of install:	Custom	•
Or, select the optional components you wish to install:	Media Player (required) Start Menu Shortcut Web plugins Mozilla plugin ActiveX plugin	•
Space required, 122 1MP	Description	
Space required, 122, 1MD	Position your mouse over a component description.	to see its
VideoLAN VLC media player		
	< Back Next	> Cancel

7. เลือกที่เก็บและคลิกปุ่ม Instal
🛓 VLC media player Setup
Choose Install Location Choose the folder in which to install VLC media player.
Setup will install VLC media player in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.
Destination Folder C:\Program Files\VideoLAN\VLC Browse
Space required: 122.1MB Space available: 14.3GB
VideoLAN VLC media player



9. เมื่อติดตั้งเรียบร้อยจะแสดงหน้าต่างของโปรแกรม



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10.	ทคอ	มพวเด	าอรเ	ครอง	เท 2	୭୭	ดง	ขน	ตอน	แดยา	ากเ	เขา	งตน



ทดลองการ Streaming บนโปรโตคอล RTSP (Real Time

Streaming Protocol)

```
ี่ กำหนดเครื่องที่ใช้ในการทดลอง
- PC1 มี IP Address : 192.168.1.8
- PC2 มี IP Address : 192.168.1.9
```

1. ที่ PC เครื่องที่ 1 เปิดโปรแกรม VCL media player เลือก Media > Stream

🚊 v	LC media player					
Med	lia Playback Audio Video	Subtitle	Tools	View	Help	
	Open File	Ctrl+C)			
	Open Multiple Files	Ctrl+S	hift+0			
	Open Folder	Ctrl+F				
٢	Open Disc	Ctrl+D)			
뫟	Open Network Stream	Ctrl+N	1			
	Open Capture Device	Ctrl+C	2			
	Open Location from clipboard	Ctrl+V	1			
	Open Recent Media		•			
	Save Playlist to File	Ctrl+Y	1			
	Convert / Save	Ctrl+R	t –	1		
((e))	Stream	Ctrl+S				
	Quit at the end of playlist					
	Quit	Ctrl+C	2			
						:
			×			(1) 89%

เมื่อขึ้นหน้าจอ Stream ให้คลิกปุ่ม

Open Me	dia				<u> </u>
File	Oisc	^{∎ ∎} Network	📑 Capture Device		
File Sele	tion				
You can	select local fil	es with the follow	ving list and buttons.		
					Add
					Remove
Use a	subtitle file				
				Br	owse
Show mo	re ontions				
				Stroom	Cancel
				Stream	

3. เลือกวีดีโอและ คลิกปุ่ม <mark>Open ▼</mark>		
🛓 Select one or multiple files		x
✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Search Video	٩
Organize 🔻 New folder	• • •	0
Favorites Desktop Downloads Recent Places Libraries Documents Music Pictures Videos Homegroup Computer		
File name: GTAV73 🗸	All Files (*.*) Open Cancel	•

4. จากนั้นคลิกปุ่ม Stream 🔻

🛓 Open Media	
File 💿 Disc 📲 Network 📑 Capture Device	
File Selection You can select local files with the following list and buttons.	
C:\Users\Master\Desktop\Video\GTAV73.mp4	Add Remove
Use a subtitle file	Browse
Show more options	Stream 🔻 Cancel

	9						2
stream Outpu							
urce Set up media s	ources to stre	am					
This wizard wi You should sta	l allow you to art by checking	stream or conv g that source m	vert your media for natches what you w	use locally, on your pri ant your input to be ar	vate network, or on the nd then press the "Next	e Internet. " button to continu	e.
Source: file	///C:/Users/M	laster/Desktop	/Video/GTAV73.mp4				
Source: file Type: file	:///C:/Users/M	laster/Desktop)/Video/GTAV73.mp4	ł			
Source: file Type: file	:///C:/Users/M	1aster/Desktop	/Video/GTAV73.mp4	k			
Source: file Type: file	:///C:/Users/N	laster/Desktop)/Video/GTAV73.mp4		Back	Next	Cancel

Cancel

- Add... 6. เลือก RTSP และคลิกปุ่ม ? X 🛓 Stream Output **Destination Setup** Select destinations to stream to + Add destinations following the streaming methods you need. Be sure to check with transcoding that the format is compatible with the method used. New destination File Add File HTTP Display locally MS-WMSP (MMSH) RTSP RTP / MPEG Transport Stream RTP Audio/Video Profile UDP (legacy) IceCast
- Next > ระบุในช่อง Port และ Path ตามภาพ จากนั้นคลิกปุ่ม 7. ? X 🛓 Stream Output **Destination Setup** Select destinations to stream to RTSP 🔀 + This module outputs the transcoded stream to a network via RTSP. G000 🗘 Port Path /video Cancel Back Next

8. คลิกปุ่ม <mark>Next ></mark>	
🛓 Stream Output	? ×
Transcoding Options Select and choose transcoding options	
Activate Transcoding	
Profile	Video - H. 264 + MP3 (MP4) 🔹 🔀 🗐
	Back Next Cancel
Miscellaneous Option	IS
Stream all elemen	ntary streams
9. เลอก	จากนนคลกบุ่ม 🦲 🔤 🤤 🦉
Stream Output	
Set up any additional options for streaming	
Miscellaneous Options	
Stream all elementary streams	
Generated stream output string	
:sout=#transcode{vcodec=h264,acodec=mpga :sout-keep	a,ab=128,channels=2,samplerate=44100}:rtp{sdp=rtsp://:8000/video} :sout-all

۵.	/LC media player					x
Me	dia Playback Audio Video	Subtitle	Tools	View	Help	
	Open File	Ctrl+C	0			
	Open Multiple Files	Ctrl+S	hift+0			
	Open Folder	Ctrl+F				
0	Open Disc	Ctrl+D				
뫟	Open Network Stream	Ctrl+N	l)			
	Open Capture Device	Ctrl+C				
	Open Location from clipboard	Ctrl+V				
	Open Recent Media		•			
	Save Playlist to File	Ctrl+Y				
	Convert / Save	Ctrl+R				
((•))	Stream	Ctrl+S				
	Quit at the end of playlist					
	Quit	Ctrl+Q	1			
			-		1000/	
			5		()) 100%	

10. ที่เครื่องที่ 2 เปิดโปรแกรม VLC media player เลือก Media > Open Network Stream

11. ระบุข้อมูลตามภาพ จากนั้นคลิก 🦳 Play 🔽 ก็จะสามารถดูวีดีโอที่เครื่องที่ 1 Streaming ได้

Copen Media
File 💿 Disc 📲 Network 📑 Capture Device
Network Protocol
rtsp://192.168.1.8:8000/video
http://www.example.com/stream.avi rtp://@:1234 mms://mms.examples.com/stream.asx rtsp://server.example.org:8080/test.sdp http://www.yourtube.com/watch?v=gg64x
Show more options

คือ โปรโตคอล ที่เครื่องที่ 1 ได้เลือกไว้ในขั้นตอนที่ 6

192.168.1.8	คือ IP	Addre	ess	ของเครื่องที่จะ	Streaming
		ام	ال.	4	

8000 คือ Port ทีเครื่องที่ 1 จะ Strea	ming រ	JJ
---------------------------------------	--------	----

video คือ Path ที่เครื่องที่ 1 ได้กำหนดไว้

rtsp

*Local Area Connection		
File Edit View Go Capture Analyze	Statistics Telephony Wireless To	ools Help
🖉 🔳 🖉 🛞 🚹 🔜 🕿 🖾 🔍 👄 👄	🛎 🗿 🌡 🧮 🗐 🔍 Q Q I	RTR
Analysis disclose films and the		
Apply a display filter <ctri-></ctri->		Expression +
No. Time Source	Destination Protocol	Length Info
7 1.030115 192.168.1.9	192.168.1.8 TCP	203 49167→8000 [PSH, ACK] Seq=124 Ack=125 Win=64116 Len=149
8 1.079268 192.168.1.8	192.168.1.9 TCP	260 8000→49167 [PSH, ACK] Seq=125 Ack=273 Win=64091 Len=206
9 1.290716 192.168.1.9	192.168.1.8 TCP	54 49167→8000 [ACK] Seq=273 Ack=331 Win=63910 Len=0
10 1.291950 192.168.1.8	192.168.1.9 TCP	607 8000→49167 [PSH, ACK] Seq=331 Ack=273 Win=64091 Len=553
11 1.294610 192.168.1.9	224.0.0.22 IGMPv3	54 Membership Report / Join group 228.67.43.91 for any sources
12 1.294992 192.168.1.9	192.168.1.8 TCP	237 49167→8000 [PSH, ACK] Seq=273 Ack=884 Win=63357 Len=183
13 1.295102 192.168.1.9	224.0.0.22 IGMPv3	3 54 Membership Report / Leave group 228.67.43.91
14 1.318854 192.168.1.8	192.168.1.9 TCP	324 8000→49167 [PSH, ACK] Seq=884 Ack=456 Win=63908 Len=270
15 1.319714 192.168.1.9	192.168.1.8 TCP	264 49167→8000 [PSH, ACK] Seq=456 Ack=1154 Win=63087 Len=210
16 1.369852 192.168.1.8	192.168.1.9 TCP	324 8000→49167 [PSH, ACK] Seq=1154 Ack=666 Win=63698 Len=270
17 1.370193 192.168.1.9	192.168.1.8 UDP	46 53756→63291 Len=4
18 1.370315 192.168.1.9	192.168.1.8 UDP	46 53757→63292 Len=4
19 1.370388 192.168.1.9	192.168.1.8 UDP	46 53756→63291 Len=4
20 1.370448 192.168.1.9	192.168.1.8 UDP	46 53757→63292 Len=4 🗸
Ename 1: 208 bytes on wire (1664 b	its), 208 bytes cantured (1664	4 hits) on interface 0
Ethernet II, Src: PcsSvste d3:68:9	9 (08:00:27:d3:68:99), Dst: IF	Pv6mcast 0c (33:33:00:00:00:0c)
Internet Protocol Version 6, Src:	fe80::9831:6ff3:616:851d, Dst:	: ff02::c
User Datagram Protocol, Src Port:	56101, Dst Port: 1900	
Simple Service Discovery Protocol		
0000 33 33 00 00 00 0c 08 00 27 d3	68 99 86 dd 60 00 33	'.h`-
0010 00 00 00 9a 11 01 te 80 00 00	00 00 00 00 98 31	1 =
0020 0T TO 00 10 85 10 TT 02 00 00	00 00 00 00 00 00 00 0	1 (M-
0040 53 45 41 52 43 48 20 2a 20 48	54 54 50 2f 31 2e SFARCH *	HTTP/1.
0050 31 0d 0a 48 6f 73 74 3a 5b 46	46 30 32 3a 3a 43 1Host:	[FF02::C
wireshark_62EAA0F6-3FF8-4B77-868A-2/	A5457D666D9_20161129001822_a02624	Packets: 1155 · Displayed: 1155 (100.0%) Profile: Default

	คริเ		d A	6			
12	າເພງາເປັນ	Wireshark	เพลาเด	าราะห	nackets	ของการ	Streaming
		VIICONUIK			puonoio		oucuming

ที่เครื่องที่ 2 ขอเปิด Streaming จะมีการขอกันผ่านโปรโตคอล TCP จากนั้นเมื่อได้รับอนุญาตจากเครื่องที่ 1 แล้วจะส่ง Streaming ผ่านโปรโตคอล UDP

*Local Area Connection		
File Edit View Go Capture Analyze	Statistics Telephony Wireless	ess Tools Help
🖌 🔳 🧷 💿 🔒 🔚 🗙 🖻 🔍 👄 👄	🗠 🗿 🖡 🚛 🥅 Q, Q,	
Apply a display filter <ctrl-></ctrl->		Expression +
No Time Cource	Dectination Pr	Protocol Length Tofo
1142 9 483906 192 168 1 8	192 168 1 9 UI	IIDP 1442 63292-53758 Len=1490
1143 9.483908 192.168.1.8	192.168.1.9	IIDP 115 63292+53758 Len=73
1144 9.483909 192.168.1.8	192.168.1.9 U	UDP 475 63291→53756 Len=433
1145 9.493034 192.168.1.9	192.168.1.8 TO	TCP 205 49167→8000 [PSH, ACK] Seq=988 Ack=1935 Win=64074 Len=151
1146 9.493163 192.168.1.9	192.168.1.8 UE	UDP 82 53757+63292 Len=40
1147 9.493316 192.168.1.9	192.168.1.8 RT	RTCP 82 Receiver Report Goodbye
1148 9.493420 192.168.1.9	192.168.1.8 TO	TCP 54 49167→8000 [FIN, ACK] Seq=1139 Ack=1935 Win=64074 Len=0
1149 9.493859 192.168.1.8	192.168.1.9 RT	RTCP 110 Sender Report Source description [Malformed Packet]
1150 9.493861 192.168.1.8	192.168.1.9 TO	TCP 60 8000→49167 [ACK] Seq=1935 Ack=1140 Win=63225 Len=0
L 1151 9.493862 192.168.1.8	192.168.1.9 RT	RTCP 110 Sender Report Source description [Malformed Packet]
1152 9.493904 192.168.1.9	192.168.1.8 IC	ICMP 138 Destination unreachable (Port unreachable)
1153 9.520274 192.168.1.8	192.168.1.9 TO	TCP 220 8000→49167 [PSH, ACK] Seq=1935 Ack=1140 Win=63225 Len=166
1154 9.520325 192.168.1.9	192.168.1.8 TO	TCP 54 49167+8000 [RST, ACK] Seq=1140 Ack=2101 Win=0 Len=0
1155 10.124059 te80::9831:6tt3:616	5:851d ##02::c SS	SSDP 208 M-SEARCH * HTTP/1.1
Frame 1147: 82 bytes on wire (656)	bits), 82 bytes captured	(656 bits) on interface 0
Ethernet II, Src: PcsSyste_18:54:b	1 (08:00:27:18:54:b1), Dst	st: PcsSyste_d3:68:99 (08:00:27:d3:68:99)
Internet Protocol Version 4, Src:	192.168.1.9, Dst: 192.168	8.1.8
User Datagram Protocol, Src Port:	53759, Dst Port: 63293	
Real-time Transport Control Protoc	ol (Receiver Report)	*
0000 08 00 27 d3 68 99 08 00 27 18	54 b1 08 00 45 00 ' I	b 'T F
0010 00 44 00 f0 00 00 80 11 00 00	c0 a8 01 09 c0 a8 .D	
0020 01 08 d1 ff f7 3d 00 30 83 a3	81 c9 00 07 1f 76	=.0v
0030 22 6d 17 e9 77 2f 00 ff ff ff	00 01 6f 0d 00 00 "m	.w/o
0040 28 1d e5 66 27 ee 00 03 a9 94	81 cb 00 01 1f 76 (f	f'v
0050 22 60		
🔴 🍸 wireshark_62EAA0F6-3FF8-4B77-868A-2	A5457D666D9_20161129001822_a02	02624 Packets: 1155 · Displayed: 1155 (100.0%) · Dropped: 0 (0.0%) Profile: Default

13.	ข้อมล	packets	เมื่อสิ้นสดการ	Streaming

เมื่อเครื่องที่ 2 ปิดโปรแกรม เครื่องที่ 1 จะได้รับข้อความ Goodbye และทำการปิดการเชื่อมต่อ

ทดลองการ Streaming บนโปรโตคอล HTTP (Hypertext

Transfer Protocol)

```
ี่ กำหนดเครื่องที่ใช้ในการทดลอง
- PC1 มี IP Address : 192.168.1.8
- PC2 มี IP Address : 192.168.1.9
```

1. ที่ PC เครื่องที่ 1 เปิดโปรแกรม VCL media player เลือก Media > Stream

🛓 V	LC media player					
Med	lia Playback Audio Video	Subtitle	Tools	View	Help	
	Open File	Ctrl+C)			
	Open Multiple Files	Ctrl+S	hift+0			
	Open Folder	Ctrl+F				
0	Open Disc	Ctrl+D				
**	Open Network Stream	Ctrl+N	1			
	Open Capture Device	Ctrl+C				
	Open Location from clipboard	Ctrl+V				
	Open Recent Media		•			
	Save Playlist to File	Ctrl+Y				
	Convert / Save	Ctrl+R				
((•))	Stream	Ctrl+S				
	Quit at the end of playlist					
	Quit	Ctrl+C	2			
			C			Q) 89%

เมื่อขึ้นหน้าจอ Stream ให้คลิกปุ่ม

Open Me	dia				
File	Disc	P Network	📑 Capture Device		
File Sele	ction				
You can	select local fil	es with the follow	ving list and buttons.		_
				Add	
				Remove	
Use	a subtitle file				
				Browse	
1 -•					
Show mo	ore options				

3. เลือกวีดีโอและ คลิกปุ่ม <mark></mark>			
🛓 Select one or multiple files			x
✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	47	Search Video	٩
Organize 🔻 New folder		• •	0
★ Favorites ■ Desktop ▶ Downloads ■ Recent Places ■ Libraries ■ Documents ▶ Music ■ Pictures ■ Videos			
File name: GTAV73	•	All Files (*.*) Open	•

4. จากนั้นคลิกปุ่ม Stream ▼

🛓 Open Media	
File 💿 Disc 📲 Network 📑 Capture Device	
File Selection	
You can select local files with the following list and buttons.	
C:\Users\Master\Desktop\Video\GTAV73.mp4	Remove
Use a subtitle file	Browse
Show more options	Stream 🔻 Cancel

5.	คลิกปุ่ม <mark>Next</mark>	>				
Stream Ou	tput					? X
ource Set up me	dia sources to stream					
This wizar You shou	d will allow you to stream o d start by checking that sou	r convert your media fo rrce matches what you	r use locally, on your want your input to b	private network, or on th and then press the "Nex	e Internet. t" button to continu	e.
Source:	file:///C:/Users/Master/De	sktop/Video/GTAV73.m	04			
Type:	file					
				Back	Next	Cancel

6. เลือก HTTP และคลิกปุ่ม Add...

🛓 Stream Output		? ×
Destination Setup Select destinations to stream to		
•		
Add destinations following the streaming methem to the	nods you need. Be sure to check with transcoding that the format is com	patible with the
New destination	File File HTTP MS-WMSP (MMSH) RTSP	Add
	RIP / MPEG Transport Stream RTP Audio/Video Profile UDP (legacy) IceCast	Cancel

7. ระบุในช่อง Port และ Path ตามภาพ จากนั้นคลิกปุ่ม

 Stream Output
 ?

 Destination Setup
 Select destinations to stream to

 Image: Select destination setup
 Select destination setup

 This module outputs the transcoded stream to a network via HTTP.
 Port

 Port
 Group

 Path (video)
 Back
 Next

8 . คลิกบุ่ม <mark>──Next ></mark> ──	
🛓 Stream Output	
Transcoding Options Select and choose transcoding options	
✓ Activate Transcoding	
Profile	Video - H. 264 + MP3 (MP4) 🔹 🖹 📄
	Back Next Cancel
Miscellaneous Optio	ons
9. เลือก	entary streams จากนั้นคลิกปุ่ม Stream
🛓 Stream Output	? ×
Option Setup Set up any additional options for streaming	
Miscellaneous Options	
V Stream all elementary streams	
Generated stream output string	1 100 to the Residence - 1100 little for white for which deter 8080 bit
deo} :sout-all :sout-keep]a,aD=128,cnannels=2,samplerate=++100;art:ptiliux=rimpeytiliux=mv;,ost=.0000;vi
	Rack Stream Cancel

🛓 v	LC media player					- • ×
Med	lia Playback Audio Video	Subtitle To	ols Vie	w	Help	
	Open File	Ctrl+O				
	Open Multiple Files	Ctrl+Shift+	+O			
	Open Folder	Ctrl+F				
0	Open Disc	Ctrl+D				
*	Open Network Stream	Ctrl+N				
	Open Capture Device	Ctrl+C				
	Open Location from clipboard	Ctrl+V				
	Open Recent Media		- F 📙			
	Save Playlist to File	Ctrl+Y				
	Convert / Save	Ctrl+R		1		
((•))	Stream	Ctrl+S				
	Quit at the end of playlist					
	Quit	Ctrl+Q				
		e c x				(h) 100%

10. ที่เครื่องที่ 2 เปิดโปรแกรม VLC media player เลือก Media > Open Network Stream

11. ระบุข้อมูลตามภาพ จากนั้นคลิก 🦳 Play 🔽 ก็จะสามารถดูวีดีโอที่เครื่องที่ 1 Streaming ได้

Open Media				
🕨 File 🛛 🤅	Disc	Network	E Capture Device	
Network Pro	tocol			
Please enter	a network l	JRL:		
http://192	168.1.8:808	30/video		-
rtp://@i12: mms://mrr rtsp://serv http://www	34 is,examples,co er,example,org w.yourtube.co	m/stream.asx :8080/test.sdp m/watch?v=gg64	4×	
Show more o	ptions			
				Play 🔻 Cancel

คือ โปรโตคอล ที่เครื่องที่ 1 ได้เลือกไว้ในขั้นตอนที่ 6

192.168.1.8	คือ IP	Addre	ess	ของเครื่องที่จะ	Streaming
		ام	ال.	4	

8080	คือ Por	t ทีเครื่องที่	1 จ	າະ Streaming	มา
------	---------	----------------	-----	--------------	----

video คือ Path ที่เครื่องที่ 1 ได้กำหนดไว้

http

*local Area Connection File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help Image: Connection <								
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help 	📕 *Lo	ocal Area Connec	tion					
Image: Solution of the set of the	File	Edit View (Go Capture Analyze Sta	tistics Telephony Wire	eless To	ols Help		
Apply adaptay filter Cth/> ■ Destination Protocol Length Info 1 0.000000 192.168.1.9 192.168.1.8 TCP 66 49204-0800 [SYN] Seq=0 kin=8192 Len=0 MSS=1460 kis=256 SACK 2 0.000915 PcsSyste_d3:68:99 Broadcast ARP 60 Who has 192.168.1.9 Tell 192.168.1.8 3 0.000936 PcsSyste_d3:68:99 Broadcast ARP 60 Who has 192.168.1.9 is at 08:00:27:18:54:101 4 0.001876 192.168.1.8 192.168.1.8 TCP 66 0000-49290 [SYN, AKK] Seq=0 Ack=1 Win=8192 Len=0 MSS=1460 W 4 0.001876 192.168.1.8 TCP 66 0000-49290 [SYN, AKK] Seq=0 Ack=1 Win=8192 Len=0 MSS=1460 W 4 0.001876 192.168.1.9 192.168.1.8 TCP 54 49290-40806 [AcK] Seq=1 Ack=22 Win=65536 Len=0 6 0.002017 192.168.1.8 TCP 54 49290-40806 [AcK] Seq=1 Ack=22 Win=65536 Len=0 9 0.26658 192.168.1.8 TCP 138 [TCP Segment of a reassembled PDU] 1 0.311035 192.168.1.8 TCP 138 [TCP Segment of a reassembled PDU] 1 0.52561 192.168.1.8 TCP 14920+40806 [AcK] Seq=137 Ack=43 Win=65536 Len=0 1 2.52561 192.168.1.8 TCP 138 [TCP Segment of a reassembled PDU] 1 1 6.53541 192.168.1.8	4				0 0 T	T		
No. Time Source Destination Protocol Length Info 1 0.000000 192.168.1.9 192.168.1.8 TCP 66 49299-80808 [5YN] Seq=0 Min=B192 Len=0 MSS=1460 MSS=256 SACK 4 2 0.000915 PCSSyste_d3:68:99 Broadcast ARP 60 Huho has 192.168.1.9 Tell 192.168.1.8 Sage=0 Ack+1 Min=B192 Len=0 MSS=1460 ML 5 5 Ack 5 0.00134 192.168.1.8 TCP 56 49299-80808 [ACK] Seq=4 Ack+1 Min=B192 Len=0 MSS=1460 ML 5 0.00134 192.168.1.8 TCP 56 R08049290 [SYN, ACK] Seq=4 Ack+1 Win=65536 Len=0 6 0.002017 192.168.1.8 TCP 75 [TCP segment of a reassembled PDU] 7 0.70568 fe80::9831:061f3:c16:851d ff02::e2 MSS=1460 ML 50 0.205618 192.168.1.8 TCP 75 [TCP segment of a reassembled PDU] 11 10 0.31035 192.168.1.8 TCP 54 49299-80808 [ACK] Seq=137 Ack=45 <					~~1	L		
No. Time Source Destination Protocol Length Info 1 0.000000 192.168.1.9 192.168.1.8 TCP 66 49290+8080 [SYN] Seq=0 Win=8192 Len=0 WIS=1460 WS=256 SACK 2 0.000035 PcsSyste_d3:68:99 Broadcast AAP 60 Who has 192.168.1.9 it at 08:00:27:18:54:b1 4 0.000036 PcsSyste_d3:68:19 APP 42 122.168.1.9 it at 08:00:27:18:54:b1 4 0.00011 192.168.1.8 192.168.1.8 TCP 56 8080-49290 [SYN, ACK] Seq=1 Ack=1 Win=65536 Len=0 5 0.002017 192.168.1.9 192.168.1.8 TCP 56 8080-49290 [SVR, ACK] Seq=1 Ack=2 Win=65536 Len=0 6 0.002017 192.168.1.8 192.168.1.9 TCP 60 8080+49290 [ACK] Seq=137 Ack=8 Win=65536 Len=0 9 0.286858 192.168.1.8 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=137 Ack=8 Win=65536 Len=0 10 0.311035 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=137 Ack=47 Win=65536 Len=0 12 0.526840 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=137 Ack=47 Win=65536 Len=0 12 0.526840 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=137 Ack=	Ap	oply a display filter	<ctrl-></ctrl->					Expression +
1 0.000000 192.168.1.9 192.168.1.8 TCP 66 49200-8080 [SVM] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK 2 0.0009315 PcsSyste_d3:68:99 Broadcast ARP 60 Who has 192.168.1.9 Tell 192.168.1.8 3 0.000935 PcsSyste_d3:68:19 Broadcast ARP 60 Who has 192.168.1.9 Tell 192.168.1.8 4 0.001878 192.168.1.8 192.168.1.9 TCP 66 8080+49200 [SVM, ACK] Seq=0 Ack=1 Win=6192 Len=0 MSS=1460 W	No.	Time	Source	Destination	Protocol	Length Info		A
2 0.000015 PrcsSyste_d3:68:99 Broadcast APP 60 Who has 192.168.1.9? Tcll 192.168.1.8 3 0.000036 PrcsSyste_18:54:b1 PrcsSyste_d3:68:99 APP 42 192.168.1.9? tcll 192.168.1.8 4 0.001378 192.168.1.9 TCP 66 0808-49296 [SVM, ArK] Seq=0 Ark+1 Win=65536 Len=0 5 0.001314 192.168.1.9 192.168.1.8 TCP 54 49290-48080 [ArK] Seq=1 Ark+1 Win=65536 Len=0 6 0.002017 192.168.1.8 192.168.1.8 TCP 50 8080+49290 [ArK] Seq=1 Ark+2 Win=65536 Len=0 7 0.076988 fe880:993116 ff3:161:851d ff02:1:c SSDP 208 M-SEARCH * HTTP/1.1 8 0.286818 192.168.1.8 192.168.1.9 TCP 60 8080+49290 [ArK] Seq=1 Ark+22 Win=65536 Len=0 9 0.286858 192.168.1.9 192.168.1.8 TCP 54 49290+8080 [ArK] Seq=137 Ark+85 Win=65536 Len=0 12 0.526840 192.168.1.8 TCP 54 49290+8080 [ArK] Seq=137 Ark+80 Win=65024 Len=0 12 0.526840 192.168.1.8 TCP 54 49290+8080 [ArK] Seq=137 Ark+80 Win=65024 Len=0 14 1.697941 192.168.1.7 239.255.255.250 SSDP 215 M-SEARCH * HTTP/1.1 * P Frame 9: 1	F	1 0.000000	192.168.1.9	192.168.1.8	TCP	66 49290→8080 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 W	S=256 SACK
3 0.000936 PccSyste_18:54:b1 PccSyste_d3:68:99 44 192.168.1.9 192.168.1.9 192.168.1.9 4 0.001376 192.168.1.8 192.168.1.8 TCP 66 8080+49290 [SYN, ACK] Seq=0 Ack=1 Win=65536 Len=0 5 0.001914 192.168.1.9 192.168.1.8 TCP 54 42929-8080 [ACK] Seq=1 Ack=1 Win=65536 Len=0 6 0.002017 192.168.1.9 192.168.1.8 TCP 60 8080+49290 [ACK] Seq=1 Ack=2 Win=65536 Len=0 7 0.076908 fe80::9831:6ff3:616:851d ff02::c SSDP 208 SSD		2 0.000915	PcsSyste_d3:68:99	Broadcast	ARP	60 Who has 192.	168.1.9? Tell 192.168.1.8	
4 0.001878 192.168.1.8 192.168.1.9 TCP 66 0808+92206 [SVM, ACK] Seq=4 Ack=1 Win=6192 Len=0 MSS=1460 W 5 0.001914 192.168.1.9 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=1 Ack=1 Win=65536 Len=0 6 0.002017 192.168.1.9 192.168.1.8 TCP 75 [TCP segment of a reassembled PDU] 7 0.076908 fe88:983116f73:616:6531d ff02::c SSDP 208 M-SEARCH * HTTP/1.1 8 0.266818 192.168.1.8 192.168.1.9 TCP 60 08080+49290 [ACK] Seq=1 Ack=2 Win=65536 Len=0 9 0.266858 192.168.1.8 192.168.1.9 TCP 138 (TCP segment of a reassembled PDU] 10 0.311035 192.168.1.8 192.168.1.8 TCP 54 49290+40806 [ACK] Seq=137 Ack=65 Win=65536 Len=0 12 0.526840 192.168.1.8 192.168.1.9 TCP 418 [TCP segment of a reassembled PDU] 13 0.734972 192.168.1.9 192.168.1.8 TCP 54 49290+40806 [ACK] Seq=137 Ack=47 Win=65536 Len=0 12 0.526840 192.168.1.9 192.168.1.8 TCP 54 49290+40808 [ACK] Seq=137 Ack=47 Win=65536 Len=0 12 0.526840 192.168.1.9 192.168.1.8 TCP 54 49290+40808 [ACK] Seq=137 Ack=47 Win=65504 Len=0 14 1.697941 192.168.1.9 </td <td></td> <td>3 0.000936</td> <td>PcsSyste_18:54:b1</td> <td>PcsSyste_d3:68:99</td> <td>ARP</td> <td>42 192.168.1.9</td> <td>is at 08:00:27:18:54:b1</td> <td></td>		3 0.000936	PcsSyste_18:54:b1	PcsSyste_d3:68:99	ARP	42 192.168.1.9	is at 08:00:27:18:54:b1	
5 0.001314 192.168.1.9 192.168.1.8 TCP 5 49299-8080 [ACK] Seq=1 Ack=1 Win=65536 Len=0 6 0.002017 192.168.1.9 192.168.1.8 TCP 75 [TCP segment of a reassembled PDU] 7 0.076908 fe80::9831:6ff3:616:851d ff02::c SSDP 208 M-SEARCH * HTTP/1.1 8 0.286818 192.168.1.8 192.168.1.9 TCP 60 8080+49290 [ACK] Seq=1 Ack=2 Win=65536 Len=0 9 0.286818 192.168.1.9 192.168.1.8 TCP 138 [TCP segment of a reassembled PDU] 10 0.311035 192.168.1.9 192.168.1.9 TCP 449290+8080 [ACK] Seq=137 Ack=3 Win=65536 Len=0 12 0.526840 192.168.1.9 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=137 Ack=3 Win=65536 Len=0 12 0.526840 192.168.1.9 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=137 Ack=47 Win=65024 Len=0 13 0.73472 192.168.1.7 192.168.1.8 TCP 54 49290+8080 [ACK] Seq=137 Ack=47 Win=65024 Len=0 14 1.697941 192.168.1.7 239.255.255.250 SSDP 215 M-SEARCH * HTTP/1.1 + P Frame 9: 169 bytes on wire (1352 bits), 169 bytes captured (1352 bits) on interface 0 + + Transmission Control Protocol, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 + + 0000 88 00 27 d3 68 99 08 00 27 18 54 bl 08 00 45 00		4 0.001878	192.168.1.8	192.168.1.9	TCP	66 8080→49290 [!	SYN, ACK] Seq=0 Ack=1 Win=8192 Len=0	MSS=1460 W
6 6.002021 192.168.1.9 192.168.1.8 TCP 75 TCP segment of a reassembled POU] 7 0.076908 fc88:19831:6ff3:616:851d ff02::c SDP 208 M-SEARCH * HTTP/1.1 8 0.286818 192.168.1.9 192.168.1.8 TCP 60 8080+49290 [Ack] Seq=1 Ack=22 Win=65536 Len=0 9 0.286858 192.168.1.8 192.168.1.8 TCP 138 [TCP segment of a reassembled POU] 10 0.31035 192.168.1.8 192.168.1.8 TCP 54 49290+8080 [Ack] Seq=137 Ack=85 Win=65536 Len=0 12 0.526840 192.168.1.9 192.168.1.8 TCP 54 49290+8080 [Ack] Seq=137 Ack=47 Win=65024 Len=0 13 0.734972 192.168.1.9 192.168.1.8 TCP 54 49290+8080 [Ack] Seq=137 Ack=47 Win=65024 Len=0 14 1.697941 192.168.1.9 192.168.1.8 TCP 54 49290+8080 [Ack] Seq=137 Ack=47 Win=65024 Len=0 14 1.697941 192.168.1.9 192.168.1.8 TCP 158 V55AcKH * HTTP/1.1 • 12 Frame 9: 169 bytes on wire (1352 bits), 169 bytes captured (1352 bits) on interface 0 • • • 14 1.697941 192.168.1.9, 0st: 192.168.1.8 192.168.1.8 • • <td< td=""><td></td><td>5 0.001914</td><td>192.168.1.9</td><td>192.168.1.8</td><td>TCP</td><td>54 49290→8080 [/</td><td>ACK] Seq=1 Ack=1 Win=65536 Len=0</td><td></td></td<>		5 0.001914	192.168.1.9	192.168.1.8	TCP	54 49290→8080 [/	ACK] Seq=1 Ack=1 Win=65536 Len=0	
7 0.076988 fe80:9831.6ff3:616:851d ff02::c SSDP 208 M-SEARCH * HTTP/1.1 8 0.286818 192.168.1.9 TCP 108 0649290 fCK(S) Seq=1.4 ck=22 Win=65536 Len=0 9 0.286818 192.168.1.8 192.168.1.8 HTTP 169 GET /video HTTP/1.1 10 0.311035 192.168.1.8 192.168.1.8 TCP 138 [TCP segment of a reassembled PDU] 11 0.525561 192.168.1.8 192.168.1.8 TCP 54 49290-8880 [ACK] Seq=137 Ack=85 Win=65536 Len=0 12 0.526840 192.168.1.8 192.168.1.8 TCP 446 [TCP segment of a reassembled PDU] 13 0.734972 192.168.1.7 239.255.250 SDP 215 M-SEARCH * HTTP/1.1 • + 141.697941 192.168.1.7 239.255.255.250 SDP 215 M-SEARCH * HTTP/1.1 • Frame 9: 169 bytes on wire (1352 bits), 109 bytes captured (1352 bits) on interface 0 • • • • Ethernet II, Src: PcsSyste_18:54:b1 (08:00:27:18:54:b1), Dst: PcsSyste_d3:68:99 (08:00:27:d3:68:99) • • • • Iteramision Control Protocol, Src Port: 49290, Dst Port: 80808, Seq: 22, Ack: 1, Len: 115 • •<		6 0.002017	192.168.1.9	192.168.1.8	тср	75 [TCP segment	of a reassembled PDU]	
8 0.266858 192.168.1.8 192.168.1.8 192.168.1.9 102.168.1.8 1102.168.1.8 1102.168.1.8 1102.168.1.8 1102.168.1.8 1102.168.1.9 102.168.1.9 102.168.1.9 102.168.1.9 102.168.1.8 1102.168.1.8 1102.168.1.8 1102.168.1.8 1102.168.1.8 1102.168.1.8 102.168.1.8		7 0.076908	fe80::9831:6ff3:616:8	51d ff02::c	SSDP	208 M-SEARCH * H	TTP/1.1	
9 9 0.286858 192.168.1.9 192.168.1.8 111P 160 611 P1.1.1 10 0.31035 192.168.1.8 17P 138 [TCP segment of a reassembled PDU] 11 0.525561 192.168.1.8 192.168.1.8 TCP 449290+8080 [ACK] Seq=137 Ack=85 Win=65536 Len=0 12 0.526840 192.168.1.8 192.168.1.8 TCP 449290+8080 [ACK] Seq=137 Ack=85 Win=65536 Len=0 12 0.526840 192.168.1.9 192.168.1.9 TCP 441 [CTCP segment of a reassembled PDU] 13 0.734972 192.168.1.7 129.255.255.250 SSDP 215 M-SEARCH * HTTP/1.1 P Frame 9: 169 bytes on wire (1352 bits), 169 bytes captured (1352 bits) on interface 0 P thernet II, Src: PcSSyste_18:54:bl1, 08:00:27:18:54:bl2, 05t: 192.168.1.8 Not: Port: 192.168.1.9 Not: Port: 192.168.1.9 P Transmission Control Protocol, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 P [2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] We co 8a 16 90 60 80 eo 27 18 54 b1 08 60 45 90 0000 08 60 92 7 d3 68 99 08 60 eo 27 18 54 b1 08 60 45 90		8 0.286818	192.168.1.8	192.168.1.9	ТСР	60 8080→49290 [/	ACK] Seq=1 Ack=22 Win=65536 Len=0	
10 0.311055 192.168.1.8 192.168.1.9 1CP 13 0.73261 122.168.1.8 192.168.1.8 102.168.1.9 124.168.1.8 192.168.1.9 124.168.1.8 192.168.1.9 124.168.1.8 192.168.1.9 124.168.1.8 192.168.1.9 124.168.1.8 192.168.1.8 192.168.1.9 124.168.1.8 192.168.1.9 124.168.1.8 192.168.1.9 121.168.1.8 122.168.1.9 121.168.1.8 122.168.1.9 121.168.1.8 122.168.1.9 121.168.1.8 121.168.1.7 123.255.250 52DP 121.57.55.250 52DP 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250 125.75.250<	+	9 0.286858	192.168.1.9	192.168.1.8	HTTP	169 GET /video H	TTP/1.1	
1 0.525501 192.168.1.9 192.168.1.6 1CP 54 94290+08080 [Ack] Seq=137 Ack=55 Win=05505 CEH## 1 0.526840 192.168.1.9 192.168.1.8 TCP 440290+8080 [Ack] Seq=137 Ack=55 Win=05505 CEH## 1 1.697941 192.168.1.7 239.255.255.250 SSDP 215 M-SEARCH * HTTP/1.1 • 0 Frame 9: 169 bytes on wire (1352 bits), 169 bytes captured (1352 bits) on interface 0 • • 0 Ethernet II, Src: PcsSyste_18:54:b1 (08:00:27:18:54:b1), Dst: PcsSyste_d3:68:99 (08:00:27:d3:68:99) • • 0 Internet Protocol Version 4, Src: 192.168.1.9, Dst: 192.168.1.8 • • 0 Transmission Control Protocol, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 • • 0 2 Reasembled TCP Segments (136 bytes): #6(21), #9(115)] • • 0 000 00 00 88 06 00 00 c0 88 01 09 c0 88 • • • • 0010 00 80 ef 00 48 66 f7 37 43 a2 01 39 32 2e • • • • 0020 01 00 83 ef 00 00 48 6f 73 74 3a 20 31 39 32 2e • • •		10 0.311035	192.168.1.8	192.168.1.9	TCP	138 [ICP segment	of a reassembled PDUj	
12 0.320840 192.108.1.5 192.108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.9 102. 108.1.8 102. 108.1.9 102. 108.1.8 <td></td> <td>11 0.525561</td> <td>192.168.1.9</td> <td>192.168.1.8</td> <td>TCP</td> <td>54 49290+8080 [/</td> <td>ACK] Seq=137 ACK=85 Win=65536 Len=0</td> <td></td>		11 0.525561	192.168.1.9	192.168.1.8	TCP	54 49290+8080 [/	ACK] Seq=137 ACK=85 Win=65536 Len=0	
15 0.7349/2 192.108.1.7 192.108.1.7 192.108.1.7 192.108.1.7 239.255.255 550 215 M-SEARCH * HTTP/1.1 - Frame 9: 169 bytes on wire (1352 bits), 169 bytes captured (1352 bits) on interface 0 Ethernet II, Src: PcsSyste_18:54:b1 (08:00:27:18:54:b1), Dst: PcsSyste_d3:68:99 (08:00:27:d3:68:99) Internet Protocol Version 4, Src: 192.168.1.9, pst: 192.168.1.8 Internet Protocol Version 5, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 [2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] A 60 00 27 d3 68 99 08 00 27 18 54 b1 08 00 45 00 		12 0.526840	192.168.1.8	192.168.1.9	TCP	416 [ICP segment	of a reassembled PDUj	
Image: Product in the image: Produc		14 1 607041	192.168.1.9	192.108.1.8	CCDD	54 49290→8080 [/	ACK] Seq=137 ACK=447 W1n=65024 Len=0	
▶ Frame 9: 169 bytes on wire (1352 bits), 169 bytes captured (1352 bits) on interface 0 ▲ ▶ Ethernet II, 5rc: Pc5Syste_18:54:bil (08:00:27:18:54:bl), Dst: Pc5Syste_d3:68:99) (08:00:27:d3:68:99) ■ ▶ Internet Protocol Version 4, Src: 192.168.1.9, Dst: 192.168.1.8 ■ ▶ Transmission Control Protocol, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 ■ ■ 2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] ■ ● 000 08: 00 27: 18: 54: bil 08: 00 45: 00 h '.TE. ● 010 00: 00 48: 00 60: 00: 00: 00: 00: 00: 00: 00: 00:	1	14 1.097941	192.100.1.7	239.233.233.230	3305	215 M-SEARCH H	117/1.1	
▷ Ethernet II, Src: PcSyste_18:54:bl (08:00:27:18:54:bl), Dst: PcSyste_d3:68:99 (08:00:27:d3:68:99) ▷ Internet Protocol Version 4, Src: 192.168.1.9, Dst: 192.168.1.8 □ Transmission Control Protocol, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 ▷ [2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] • • • • • • • • • • • • • • • • • • •	D Fr	name 9: 169 b	ytes on wire (1352 bits), 169 bytes capture	d (1352	bits) on interface @)	*
 ▷ Internet Protocol Version 4, 5rc: 192.168.1.9, Dst: 192.168.1.8 ▷ Transmission Control Protocol, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 ▷ [2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] ○ @ @ @ @ @ 27 d3 68 99 88 @ 0 27 18 54 b1 @8 00 45 @'.h '.TE. ◎ @ @ @ @ 0 27 d3 68 99 88 @ 0 27 18 54 b1 @8 00 45 @'.h '.TE. ◎ @ @ @ 0 0 0 d5 @ 60 @ 0 c0 a8 01 @9 c0 a8Ho. xD8P. ◎ @ 0 0 0 0 0 0 0 0 d6 6f 73 74 3a 20 31 39 32 2eHo st: 192. ◎ @ 0 0 0 0 0 0 0 0 64 6f 73 74 3a 20 31 39 32 2eHo st: 192. ◎ @ 0 1 00 83 af 00 0 0 48 6f 73 74 3a 20 31 39 32 2eHo st: 192. ◎ @ 0 1 00 83 af 00 0 0 48 6f 73 74 3a 20 31 39 32 2eHo st: 192. ○ ? wireshark_62EAA0F6-3FF8-#877-868A-2A5457D666D9_20161129004810_a02612 ○ Packets: 464 'Displayed: 464 (100.0%) ○ Profile: Default a 	⊳ Et	thernet II, S	rc: PcsSyste_18:54:b1	08:00:27:18:54:b1),	Dst: Pc	sSyste_d3:68:99 (08:0	00:27:d3:68:99)	
▷ Transmission Control Protocol, Src Port: 49290, Dst Port: 8080, Seq: 22, Ack: 1, Len: 115 ▷ [2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] ○ 000 08 00 27 d3 68 99 08 00 27 18 54 b1 08 00 45 00 h '.TE. 0010 00 9b od f5 40 00 88 06 00 00 c0 a8 01 09 c0 a8 kD8P. 0020 01 08 c0 8a 16 90 06 46 f7 37 74 3a 20 31 39 32 2e kD8P. 00401 81 36 38 2e 31 2e 38 3a 38 30 38 30 0d 55 73 168.1.8: 80808Us ▼ Frame (169 bytes) Reassembled TCP (136 bytes) Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø </td <td>⊳ Ir</td> <td>nternet Proto</td> <td>col Version 4, Src: 192</td> <td>.168.1.9, Dst: 192.1</td> <td>68.1.8</td> <td></td> <td></td> <td>=</td>	⊳ Ir	nternet Proto	col Version 4, Src: 192	.168.1.9, Dst: 192.1	68.1.8			=
[2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] [2 Reassembled TCP Segments (136 bytes): #6(21), #9(115)] [9000 08 00 27 18 54 b1 08 00 45 00'.h '.TE. [001 00 09 b0 df b4 40 00 80 06 00 00 c0 a8 01 09 c0 a8	D TI	ransmission C	ontrol Protocol, Src Po	rt: 49290, Dst Port:	8080,	Seq: 22, Ack: 1, Len:	115	
0000 08 00 27 d3 68 99 08 00 27 l8 54 b1 08 00 45 00'.h '.TE. 0010 00 9b 0d fb 40 00 80 06 00 00 c0 a8 01 09 c0 a8k	▶ [2	2 Reassembled	TCP Segments (136 byte	s): #6(21), #9(115)]				
0000 <	0000	02 00 27 d	2 69 00 09 00 07 19 5/	b1 02 00 45 00	' h	' T E		
0020 01 08 c0 8a 1f 90 6a 14 af 44 38 0f a7 50 18	0010	00 9b 0d fl	b 40 00 80 06 00 00 ce	a8 01 09 c0 a8				â
0030 01 00 83 ef 00 00 48 6f 73 74 3a 20 31 39 32 2e Ho st: 192. 0040 31 36 38 2e 31 2e 38 3a 38 30 04 0a 55 73 168.1.8: 8080Us Frame (166 bytes) Reassembled TO (136 bytes) 0 2 wreshark_62EAA0F6-3FF8-4877-868A-2A5457D666D9_20161129004810_a02612 Packets: 464 * Displayed: 464 (100.0%) Profile: Default	0020	01 08 c0 8	a 1f 90 6b a4 14 af 44	38 Of a7 50 18	k.	D8P.		
0040 31 36 38 2e 31 2e 38 3a 38 30 38 30 0d 0a 55 73 168.1.8: 8080Us *	0030	01 00 83 e	f 00 00 48 6f 73 74 3a	20 31 39 32 2e	Но	st: 192.		
Prame (169 bytes) Reassembled TCP (136 bytes)	0040	31 36 38 20	e 31 2e 38 3a 38 30 38	30 0d 0a 55 73 16	8.1.8:	8080Us		-
😑 🍸 wireshark_62EAA0F6-3FF8-4877-868A-2A5457D666D9_20161129004810_a02612 🛛 Packets: 464 · Displayed: 464 (100.0%) 🔤 Profile: Default	Fram	e (169 bytes)	Reassembled TCP (136 bytes)					
	0	wireshark_62	2EAA0F6-3FF8-4B77-868A-2A54	7D666D9_20161129004810	a02612		Packets: 464 · Displayed: 464 (100.0%)	Profile: Default

	9 î i		d A	6			
12	เปิดโปรแกรม	Wireshark	เพอวเด	เราะห r	nackets	ของการ	Streaming
		WINGONAIN	0110 001		puonolo	0001110	ououning

ที่เครื่องที่ 2 ขอเปิด Streaming จะมีการเปิดการเชื่อมต่อผ่าน TCP และเมื่อได้รับอนุญาตจากเครื่องที่ 1 ก็ขอ วีดีโอผ่าน HTTP และเครื่องที่ 1 จะส่ง Streaming ผ่านโปรโตคอล TCP

📕 *Lo	ocal Are	ea Connec	tion																								x
File	Edit	View (Go Captur	e Anal	yze :	Statistic	cs T	elephon	y W	/ireless	Too	ls He	lp														
4		0	🗈 🗙 🖸	9.		🕸 T	7		Ð	Q	Q. 👖	i.															
Ap	ply a dis	splay filter	<ctrl-></ctrl->																					▼ E	xpressio	n	+
No.	Tir	me	Source				Destir	ation		Pro	otocol	Length	Int	ю										_			-
	446 12	2.238779	192.168.	1.8			192.	168.1.9	9	тс	P	123	7 [T	CP se	gment	ofar	eass	emble	ed PD	U]							
	447 12	2.238830	192.168.	1.9			192.	168.1.8	8	тс	P	5	4 49	290→8	080 [A	CK] Se	q=13	7 Acl	c=507	104	Win=2	256 L	en=0				
	448 13	3.338232	fe80::98	31:6ff3	8:616:	:851d	ff02	::c		SS	DP	20	8 M-	SEARC	H * HT	TP/1.1											
	449 17	7.279289	fe80::98	31:6ff3	8:616:	:851d	ff02	::c		SS	DP	20	8 M-	SEARC	н * нт	TP/1.1											
	450 17	7.384564	192.168.					168.1.9		тс		31	0 [Т	CP Wi	ndow F	ull] [TCP	segme	ent o		rease	sembl	ed PDU				
	451 17	7.593358	192.168.	1.9			192.	168.1.8	В	тс	P	5	4 [T	CP Ze	roWind	ow] 49	290-	8080	[ACK] Se	q=137	7 Ack	=50736	0 Wi	.n=0		
	452 17	7.695446	HuaweiTe	_f0:8f:	de		Inte	1Cor_89	9:22:	1d AR	P	e	0 Wh	o has	192.1	68.1.7	? Te	11 19	92.16	8.1.	1				_		
	453 17	7.984428	192.168.	1.8			192.	168.1.9	9	тс		6	0 [T	CP Ze	roWind	owProb	e] [TCP :	segme		far	eass	embled	PDU			
11	454 18	3.188391	192.168.	1.9			192.	168.1.8	8	тс		5	4 [T	CP Ze	roWind	ow] [T	CP 4	CKed	unse		egmer	nt] 4	9290→8	080	[ACK		
11	455 19	9.084079	192.168.	1.8			192.	168.1.9	9	TC		6	0 [1	CP Pr	evious	segme	nt r	iot ca	aptur	ed]	LICP	segm	ent of	a r	eass		
	456 19	9.287493	192.168.	1.9	646	054.1	192.	168.1.8	8	IC	Ч.	2	4 []	CP Ze	roWind	ow] []	CP 4	CKed	unse	en s	egmer	itj 4	9290→8	080	LACK		
	457 28	0.369196	102 169	31:6113	:616:	:8510	102	::C	2	55	DP	26	8 M-	SEARC	H * HI	IP/1.1		TCD		at a	£		and lad		1		
	456 21	1 5667988	102.108.	1.8			102	168.1.9	9			5		CP Ze	rowind	OWProp		CKod	segme	nt o	таг	+1 4	empied		[ACV		
	409 21	1.300732	192.100.	1.9			192.	100.1.0	2	i C		-	Ψ ['	CF 20	FOWTING	owj[i	CF F	CKEU	unse	en s	egiiiei	iuj 4	929070	000	[ACK		
⊳ Fr	ame 9	: 169 b	ytes on w	ire (13	52 bi	its),	169	bytes o	captu	red (1352	bits)	on	inter	face Ø												-
⊳ Et	therne	t II, S	rc: PcsSy	ste_18:	54:b1	L (08:	00:2	7:18:54	4:b1)	, Dst	: Pcs	Syste	d3:	58:99	(08:00):27:d	3:68	:99)									
⊳ Ir	nterne	t Proto	col Versi	on 4, S	rc: 1	192.16	8.1.	9, Dst:	: 192	.168.	1.8																=
⊳ Tr	ransmi	ssion C	ontrol Pr	otocol,	Snc	Port:	492	90, Dst	t Por	t: 80	180, S	eq: 2	2, A	ck: 1	Len:	115											
▶ [2	2 Reas	sembled	TCP Segm	ents (1	.36 by	/tes):	#6(21), #9	9(115)]																	-
0000	08	00 27 d	3 68 99 8	8 00 2	7 18	54 b1	08	aa 45 a	20	1.6		т															
0010	00	9b Ød f	b 40 00 8	0 06 0	0 00	c0 a8	01	09 c0 a	8																		
0020	01	08 c0 8	a 1f 90 6	b a4 1	4 af	44 38	Øf	a7 50 1	18		.k	.D8															
0030	01	00 83 e	f 00 00 4	8 6f 7	3 74	3a 20	31	39 32 2	2e		.Ho s	t: 19	2.														
0040	31	36 38 2	e 31 2e 3	8 3a 3	8 30	38 30	Ød	0a 55 7	73	168.1	.8: 8	080	Js														-
Fram	e (169 b	oytes)	Reassembled	TCP (136	bytes))																					
0	🖌 wi	reshark_6	EAA0F6-3FF	8-4877-86	58A-2A	5457D6	66D9_	20161129	90048	10_a02	612					Pa	ckets:	464 • 1	Display	ed: 4	54 (100	0.0%)		F	Profile: D	efaul	t

13.	ข้อมูล packets	เมื่อสิ้นสุดการ Streaming

ปิดการเชื่อมต่อผ่านโปรโตคอล TCP