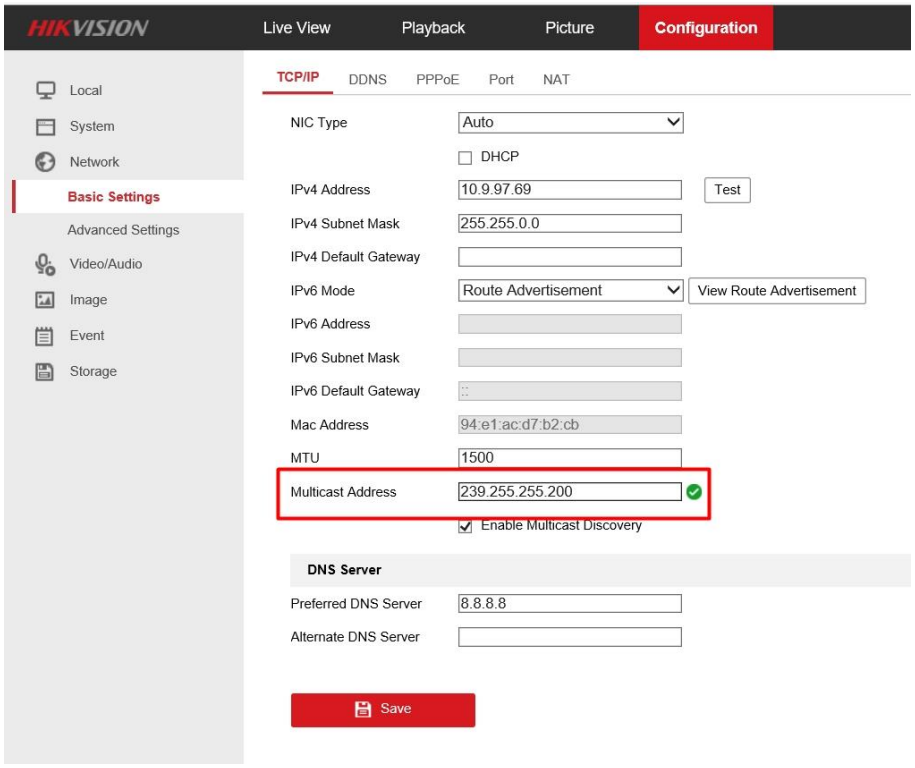
Preparation

1. IP camera and PC must be on the same network segment
2. Switchers support multicast protocol while most routers doesn't support it by default, so extra configuration is necessary.

How to Preview IP Camera via Multicast Protocol

1. Set multicast address

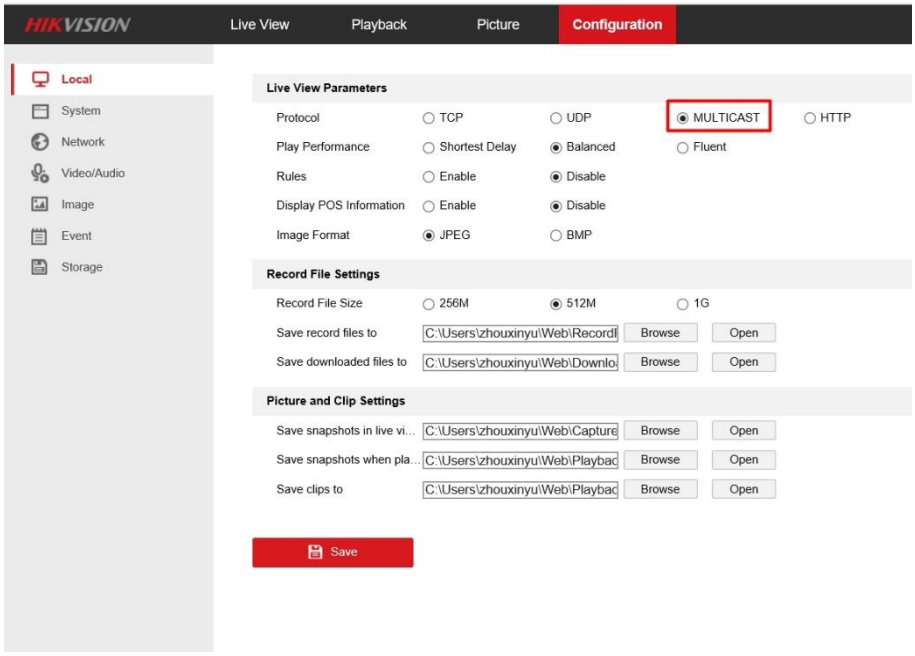
Go to [Configuration]-[Network]-[Basic Setting]-[TCP/IP] to set multicast address, range of multicast address is from 224.0.0.0 to 239.255.255.255.



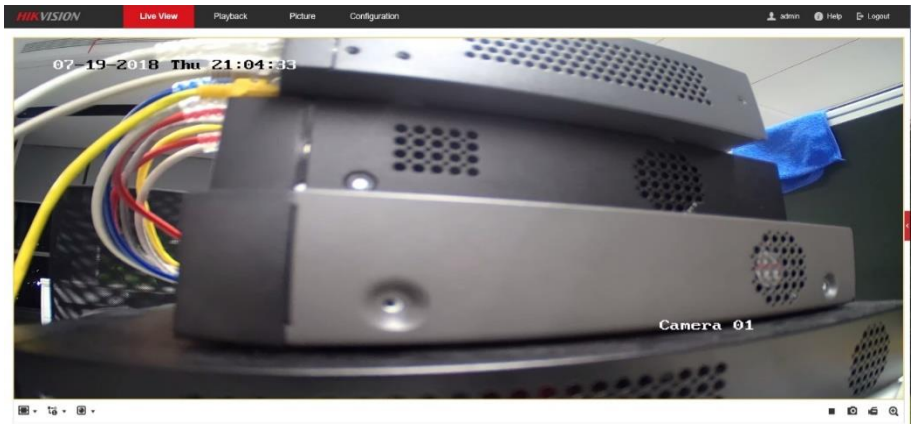
2. Set live view protocol

No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China • Tel: +86-571-8807-5998 • Fax: +1 909-595-0788
E-Mail: support@hikvision.com • www.hikvision.com

Go to [Local]-[Live View Parameters] and select MULTICAST as live view protocol



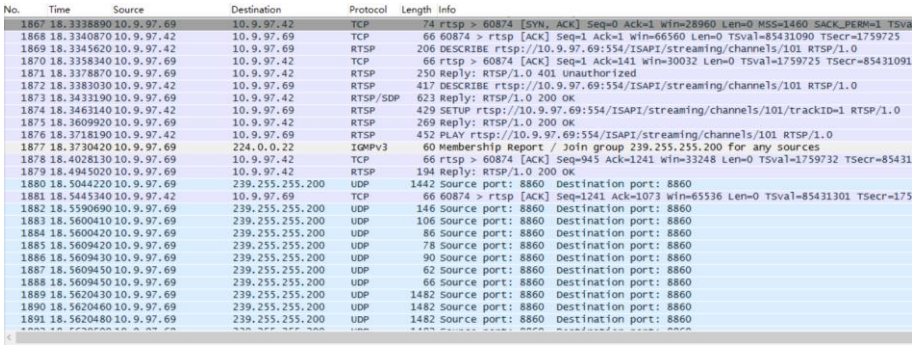
3. Start Live View



In terms of devices interaction, multicast protocol is only used to get stream during live view; otherwise the same as TCP/UDP.

Capture the package on Wireshark. It indicates that IP camera has joined in the multicast group and stream to the multicast address.

PC IP: 10.9.97.42, IP camera IP: 10.9.97.69, Multicast IP: 239.255.255.200



No.	Time	Source	Destination	Protocol	Length	Info
1867	18.3338890	10.9.97.69	10.9.97.42	TCP	74	rtsp > 60874 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1 TSva
1868	18.3340870	10.9.97.42	10.9.97.69	TCP	66	60874 > rtsp [ACK] Seq=1 Ack=1 Win=66560 Len=0 TSval=85431090 TSecr=1759725
1869	18.3345620	10.9.97.42	10.9.97.69	RTSP	206	DESCRIBE rtsp://10.9.97.69:554/ISAPI/streaming/channels/101 RTSP/1.0
1870	18.3358340	10.9.97.69	10.9.97.42	TCP	66	rtsp > 60874 [ACK] Seq=1 Ack=141 Win=30032 Len=0 TSval=1759725 TSecr=85431091
1871	18.3378870	10.9.97.69	10.9.97.42	RTSP	250	Reply: RTSP/1.0 401 Unauthorized
1872	18.3383030	10.9.97.42	10.9.97.69	RTSP	417	DESCRIBE rtsp://10.9.97.69:554/ISAPI/streaming/channels/101 RTSP/1.0
1873	18.3433190	10.9.97.69	10.9.97.42	RTSP/SDP	623	Reply: RTSP/1.0 200 OK
1874	18.3463140	10.9.97.42	10.9.97.69	RTSP	429	SETUP rtsp://10.9.97.69:554/ISAPI/streaming/channels/101/trackID=1 RTSP/1.0
1875	18.3609920	10.9.97.69	10.9.97.42	RTSP	269	Reply: RTSP/1.0 200 OK
1876	18.3718190	10.9.97.42	10.9.97.69	RTSP	452	PLAY rtsp://10.9.97.69:554/ISAPI/streaming/channels/101 RTSP/1.0
1877	18.3730420	10.9.97.69	224.0.0.22	IGMPv3	60	Membership Report / Join group 239.255.255.200 for any sources
1878	18.4028130	10.9.97.69	10.9.97.42	TCP	66	rtsp > 60874 [ACK] Seq=945 Ack=1241 Win=33248 Len=0 TSval=1759732 TSecr=85431
1879	18.4945020	10.9.97.69	10.9.97.42	RTSP	194	Reply: RTSP/1.0 200 OK
1880	18.5044220	10.9.97.69	239.255.255.200	UDP	1442	Source port: 8860 Destination port: 8860
1881	18.5445340	10.9.97.42	10.9.97.69	TCP	66	60874 > rtsp [ACK] Seq=1241 Ack=1073 Win=65536 Len=0 TSval=85431301 TSecr=175
1882	18.5590690	10.9.97.69	239.255.255.200	UDP	146	Source port: 8860 Destination port: 8860
1883	18.5600410	10.9.97.69	239.255.255.200	UDP	106	Source port: 8860 Destination port: 8860
1884	18.5600420	10.9.97.69	239.255.255.200	UDP	86	Source port: 8860 Destination port: 8860
1885	18.5609420	10.9.97.69	239.255.255.200	UDP	78	Source port: 8860 Destination port: 8860
1886	18.5609430	10.9.97.69	239.255.255.200	UDP	90	Source port: 8860 Destination port: 8860
1887	18.5609450	10.9.97.69	239.255.255.200	UDP	62	Source port: 8860 Destination port: 8860
1888	18.5609450	10.9.97.69	239.255.255.200	UDP	66	Source port: 8860 Destination port: 8860
1889	18.5620430	10.9.97.69	239.255.255.200	UDP	1482	Source port: 8860 Destination port: 8860
1890	18.5620460	10.9.97.69	239.255.255.200	UDP	1482	Source port: 8860 Destination port: 8860
1891	18.5620480	10.9.97.69	239.255.255.200	UDP	1482	Source port: 8860 Destination port: 8860

No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China • Tel: +86-571-8807-5998 • Fax: +1 909-595-0788
E-Mail: support@hikvision.com • www.hikvision.com

First Choice for Security Professionals
***HIKVISION* Technical Support**

No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China • Tel: +86-571-8807-5998 • Fax: +1 909-595-0788
E-Mail: support@hikvision.com • www.hikvision.com