



Multicast Player

Play multicast encryption streams from Ezserver

Revision: 07/28/2024



Content

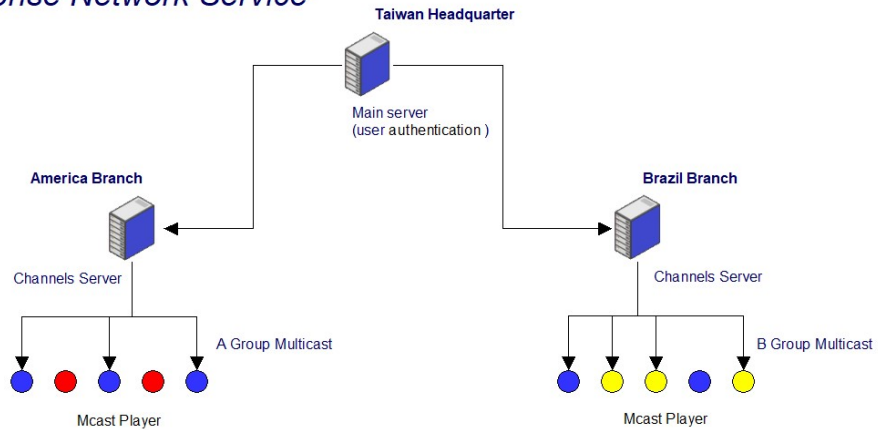
1 Overview	3
1.1 Related Information	3
2 Requirement	4
3 Specification.....	4
4 Server Multicast Setting	5
5 Server Encryption Setting	5
6 Server EPG Setting.....	6
7 And Users in Panel	7
8 Player Setting.....	7
9 Player Screenshot.....	8



1 Overview

Multicast Player plays channels from Ezserver v5.2 with user authentication and channel encryption.

Enterprise Network Service



1.1 Related Information

Ezserver v5.2

http://www.ezhometech.com/index_ezserver5.2.htm

Ezserver User Guide:

http://www.ezhometech.com/html/ezserver_user_guide.html



2 Requirement

Software :

Items	Version
Ezserver	5.2
Google Android	Above 5.x

Hardware :

Items	Specification
Processor	Above 1.0GHz
Memory	At least 1GB for 200 channels
Network Interface	802.11 a/b/g/n
Disk Space	248K bytes

3 Specification

- **Save Server Bandwidth**
- **TV, Movie and Series**
- **EPG and Catch up TV**
- **Parent Control of adult content**
- **Channel Video Format: MPEG2/H264 Transport Stream**
- **Channel Audio Format: MP3/AAC, ADTS Stream**
- **Movie Format: MP4, MKV**



4 Server Multicast Setting

Multicast Setting:

- Set Multicast output IP and Port

Ezserver v5.2 (07/21/24)

Dashboard Users Channels Movies Series EPG Ba

Setting

Multicasting Streaming Setting

Multicast Output IP Multicast Output Port

- Login ssh console and use tcpdump to check udp streams

```
root@u20:~# tcpdump -i enp0s25 | grep 224.1.1.1
04:43:57.581563 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.661703 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.661734 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.661762 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.661790 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.661817 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.661844 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.661871 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.742015 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.742047 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.742075 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.742102 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.742130 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
04:43:57.742157 IP u20.55797 > 224.1.1.1.9000: UDP, length 1316
```

5 Server Encryption Setting

- Defined at `hls_multicast_aes` of `ezserver_config.txt`
 - ✧ `hls_multicast_aes=0` (No encryption)
 - ✧ `hls_multicast_aes=1` (low encryption)
 - ✧ `hls_multicast_aes =2` (high encryption)
 - ✧ restart ezserver



6 Server EPG Setting

- Click EPG : Manage XMLTV

Ezserver v5.2 (07/21/24) Login Times: 1 User Node(192.168.0.9)

Dashboard Users Channels Movies Series EPG Connection Management

XMLTV List

Name	URL	Update date	State
1 EU EPG	http://opop.pro/xmltv.php?username=ATjcsMPEeCo&password=Qu48NGffJVYm	02/21/2023 15:16	<input type="checkbox"/>
2 EU EPG 1	http://www.ezhometech.com/~karlo/lptv/epg.xml	07/22/2024 10:17	<input checked="" type="checkbox"/>
3 EU EPG6	https://github.com/GreekTVApp/epg-greece-cyprus/releases/download/EPG/epg.xml	10/09/2023 20:32	<input type="checkbox"/>
4 repg	http://www.ezhometech.com/repg.xml	10/17/2023 11:32	<input type="checkbox"/>

Showing 1 to 4 of 4 XMLTV

- Click EPG : Manage EPG to check Channel EPG available as below:

Ezserver v5.2 (07/21/24) Login Times: 1 User Node(192.168.0.9)

Dashboard Users Channels Movies Series EPG Connection Management

EPG

Channel 1 2024 07 Query

No.	Start Time	Stop Time	Program Title	Program Description	Record Icon Path	Record
1	2024/07/05 00:25:00	2024/07/05 00:30:00	Vesti RTS	Najnovije vesti, analize i izveštaji sa lica mesta iz Srt	file://media/pictures/Sports/1	ON
2	2024/07/05 00:30:00	2024/07/05 02:20:00	Snouborder (2003)	Mladog i talentovanog snoubordera bez ambicija, ob	file://media/pictures/Sports/1	ON
3	2024/07/05 02:20:00	2024/07/05 03:10:00	Cvat lipe na Balkanu (2011)	Radnja serije smeštena je u poratni Beograd od 194	file://media/pictures/Sports/1	ON
4	2024/07/05 03:10:00	2024/07/05 03:36:00	Billi smo prvaci sveta	Dokumentarna serija	file://media/pictures/Sports/1	ON
5	2024/07/05 03:36:00	2024/07/05 04:08:00	Oko	Emisija se bavi aktualnim društvenim, politickim i ekt	file://media/pictures/Sports/1	ON



7 And Users in Panel

- Add annie user with max connection value 1.

New Android Device

User at	<input type="text" value="17"/>	Serial Number	<input type="text" value="annie"/>
Password	<input type="password"/>	Rating Password	<input type="text" value="736883522"/>
Group	<input type="text" value="basic"/>	Level	<input type="text" value="User"/>
Expired Time	<input type="text" value="1 month"/>	Connection Limit	<input type="text" value="1"/>
IP	<input type="text"/>	Device Type	<input type="text" value="android"/>

8 Player Setting

Click Setting and input Ezserver IP and API port:

www.ezhometech.com
Version: 3.0
Domain name : 192.168.0.10
Port : 17000

192.168.0.10 18000

Ezserver v5.2 (07/21/24)

DashBoard Users Channels Movies Series EPG

Setting

HTTPS Setting	Panel port	<input type="text" value="18443"/>	API port	<input type="text" value="17443"/>
	Streaming port	<input type="text" value="8443"/>		
HTTP Setting	Panel port	<input type="text" value="18000"/>	API port	<input type="text" value="17000"/>



9 Player Screenshot

- **1st column:** TV, Move, Series, Setting buttons
- **2nd column:** Channel/Movie/Series Categories
- **3rd column:** Channel List / Movie icon / Series icon
- **4th column:** Channel EPG List

