



Ezhometech Multicast Tutorial

For Local Network with Encryption Streams

Revision: 09/15/2023

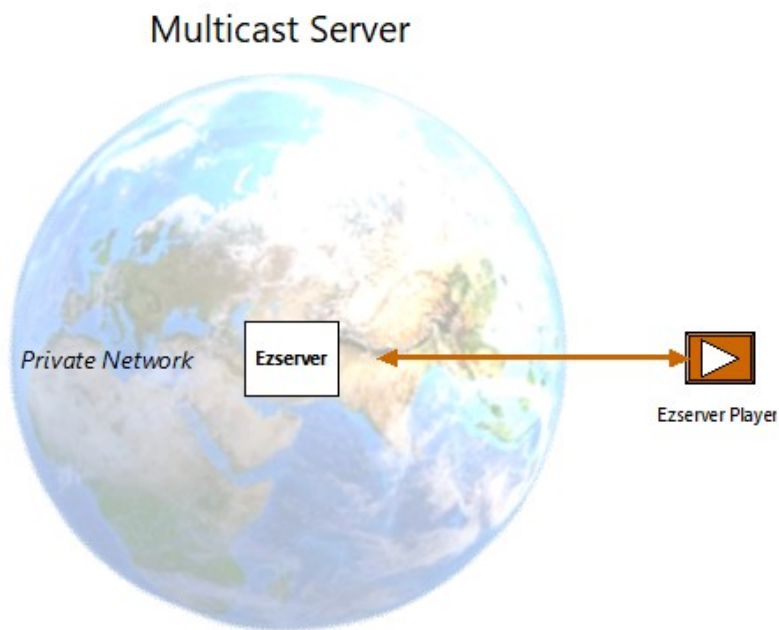
Content

1 Overview of Ezhometech Multicast.....	3
1.1 Related Information	3
2 Ezserver	4
3 Ezserver Panel Setting.....	5
4 Ezserver Mcast Player.....	6
5 EPG and Catup up TV.....	7
6 Parent Control.....	9
7 Movies and Series.....	10

1 Overview of Ezhometech Multicast

Ezhometech Multicast solution lets **Ezserver Enterprise** support Ezserver Mcast players to play channels from Ezserver via UDP encryption protocol.

1. **Ezserver Enterprise:** Act Multicast video server
2. **Ezserver Mcast Players:** Multicast encryption player.



1.1 Related Information

Ezserver Forum:

<https://ezserver.createaforum.com/>

Ezserver User Guide website:

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

2 Ezserver Enterprise

Ezserver Enterprise includes IPTV panel, and Multicast server for Multicast channel video streaming, it also provides API. for 3rd party software integration.

API has 2 types that are for cloud or app software developers.

1. **EZ Server API** provides API for Cloud applications
2. **EZ Client API** provides API for App in mobile, STB and PC.

OTT / IPTV panel:

- **User management:** create, modify and delete users.
- **Channel management:** create, modify and delete channels.
- **Movies management:** create, modify and delete movies.
- **Series management:** create, modify and delete series.
- **Reseller panel:** create, modify and delete his users.

Streaming server:

- **Video format:** H264 and H265.
- **Audio format:** AAC, MP3.

Hardware Requirement:

- **Min. Requirement:** Dual-Core, 8GB RAM, 1GB Network card.
- **More at** http://www.ezhometech.com/html/ezserver_user_guide.html#Hardware%20requirement

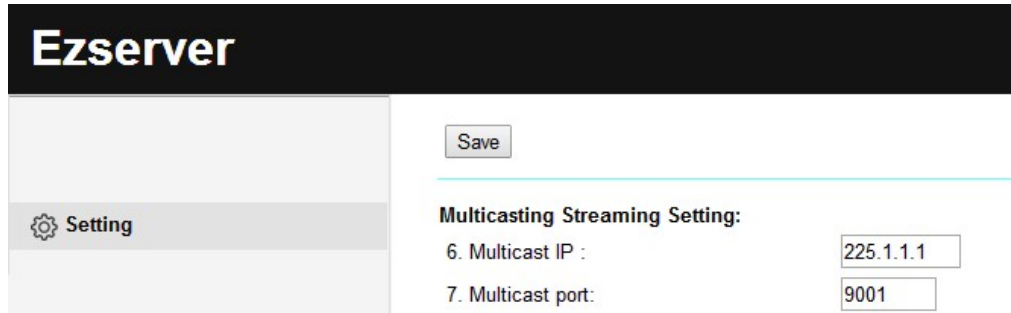
Software Requirement:

- **Linux:** Ubuntu 20.04(Recommended), Debian, Centos
- **Windows:** 64-bits

3 Ezserver Panel Setting

Multicast Setting:

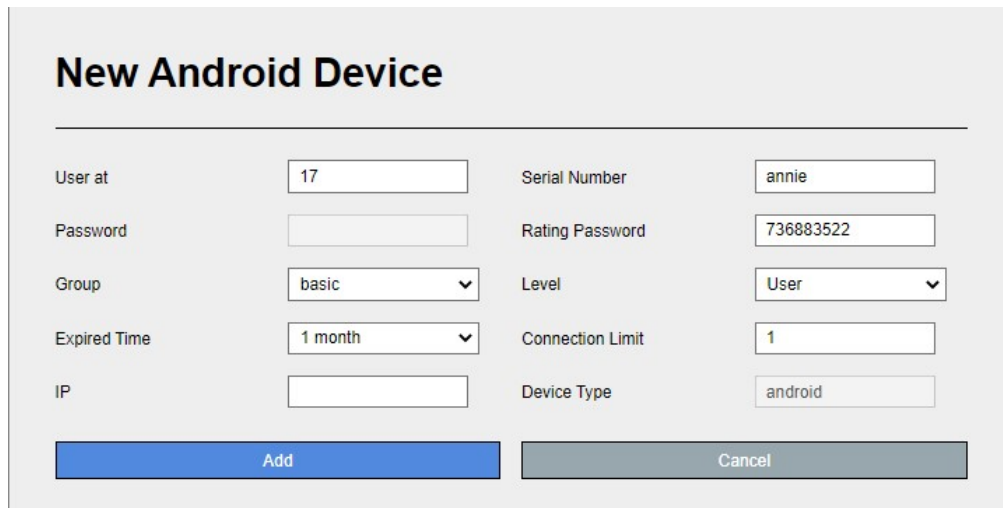
- Set Multicast output IP and Port



The interface shows the 'Ezserver' title bar. On the left is a sidebar with a 'Setting' option. On the right, under 'Multicasting Streaming Setting:', there are two input fields: '6. Multicast IP :' with the value '225.1.1.1' and '7. Multicast port:' with the value '9001'. A 'Save' button is located at the top right of the settings area.

Add users:

- Add annie user with max connection value 1.



The 'New Android Device' form contains the following fields and values:

User at	17	Serial Number	annie
Password		Rating Password	736883522
Group	basic	Level	User
Expired Time	1 month	Connection Limit	1
IP		Device Type	android

At the bottom, there are two buttons: 'Add' (blue) and 'Cancel' (grey).

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)

4 Ezserver Multicast Player

Ezserver Multicast Player is a **multicast encryption player** for local network users that plays channels, movies and series from Ezserver.

Features:

- **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**

Hardware Requirement:

- **Min. Requirement:** Above 1.0GHz, 1GB RAM, 802.11 a/b/g/n.

Software Requirement:

- **Android 5.0+**

Server IP and Port Setting:

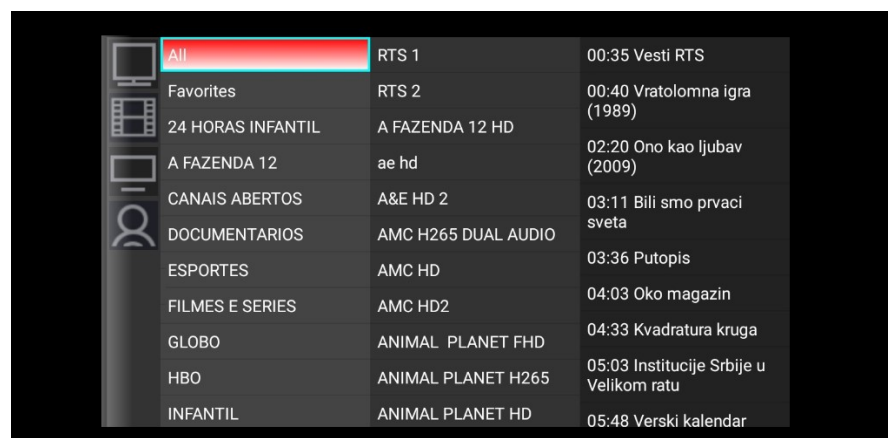
www.ezhometech.com
Version: 3.0

Domain name :

Port :

☒ ☐

Player Home:



5 EPG and Catup up TV

Panel Setting:

- Source from XMLTV: Input XMLTV http link in item#15

Ezserver

Setting

EPG Setting:

14. MPEG Transport Stream: --- Value: 0 (disabled), 1 (Real Time Extraction)

15. XMLTV EPG URL: (per day)

- ✧ Note: XMLTV More information in TvProfil XMLTV service:
<http://tvprofil.net/xmltv/>

- Source from Embedded MPEG TS stream: set "1" in item#14

Ezserver

Setting

EPG Setting:

14. MPEG Transport Stream: --- Value: 0 (disabled), 1 (Real Time Extraction)

15. XMLTV EPG URL: (per day)

- Click Panel EPG button to check Channel EPG available as below:

AI v4.1(08/27/18)
Network interface: eth0
Mac address: 001D090FD6D4

Channel No.: 2018 05

No.	Start Time YYYY/MM/DD hh:mm:ss	Stop Time YYYY/MM/DD hh:mm:ss	Program Title	
1	2018/05/14 00:55:00	2018/05/14 01:55:00	Trezor	Tr
2	2018/05/14 01:55:00	2018/05/14 02:40:00	TV lica... Kao sav normala	K
3	2018/05/14 02:40:00	2018/05/14 03:15:00	Srpski sanitet u Velikom r	S
4	2018/05/14 03:15:00	2018/05/14 03:40:00	Srbi u Australiji	
5	2018/05/14 03:40:00	2018/05/14 04:05:00	Šest lica tanga	Muzicka emisija RT

Player Setting

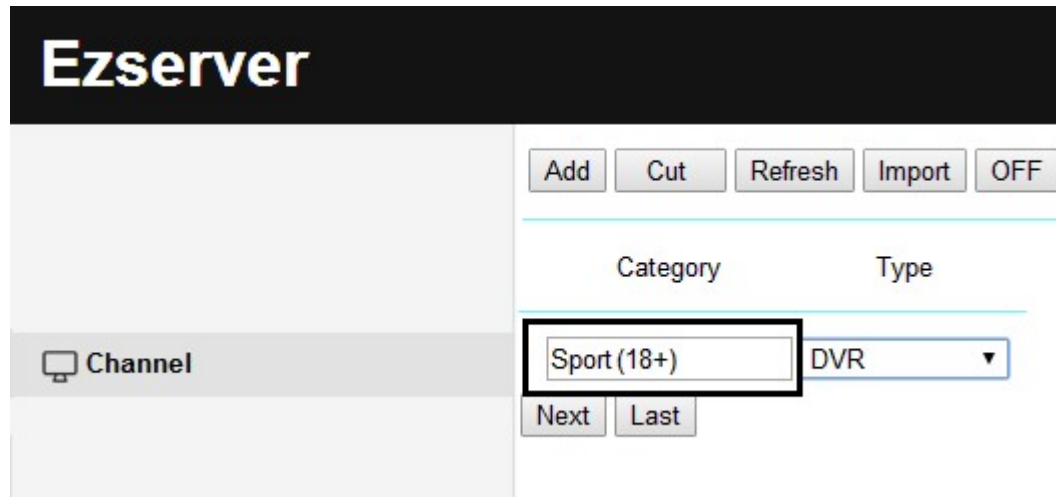
- Click Channel to show the below EPG list of the channel and [*] option of one program name is for Catch up TV that was recorded by its EPG time

Meteo Media HD	[*] 05:00 Prévisions météorologiques
A N	[*] 06:00 Prévisions météorologiques
Cpac	[*] 07:00 Prévisions météorologiques
LCN	[*] 08:00 Prévisions météorologiques
RDI	[*] 09:00 Prévisions météorologiques
TV5	[*] 10:00 Prévisions météorologiques
SMTP1	[*] 11:00 Prévisions météorologiques
ICI Artv	[*] 12:00 Prévisions météorologiques
Unis TV	[*] 13:00 Prévisions météorologiques
Tele Quebec	[*] 14:00 Prévisions météorologiques

6 Parent Control

Panel Setting:

- Add “18+” keyword into channel and movie categories of IPTV Panel

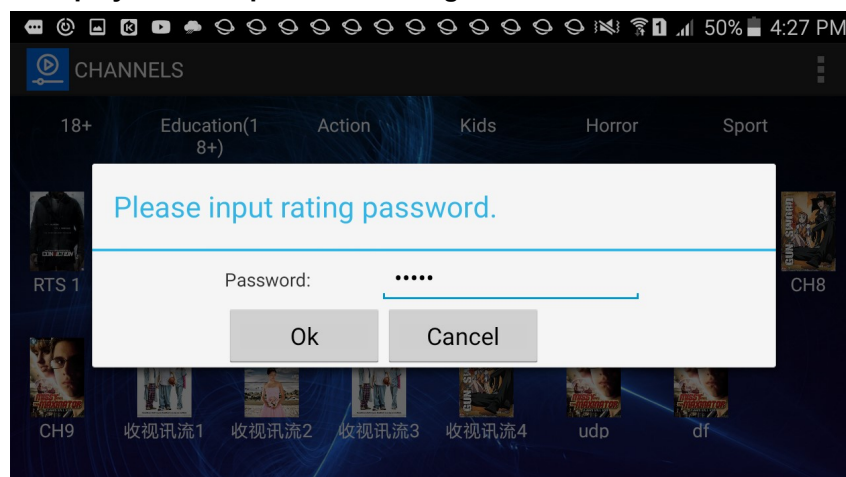


- Input rating password in user more profile as below:

User:	root
IP 2:	192.168.0.1
IP 3:	192.168.0.2
IP 4:	192.168.0.3
IP 5:	192.168.0.4
Rating Password:	marocco2
Level:	Administrator


Player Side

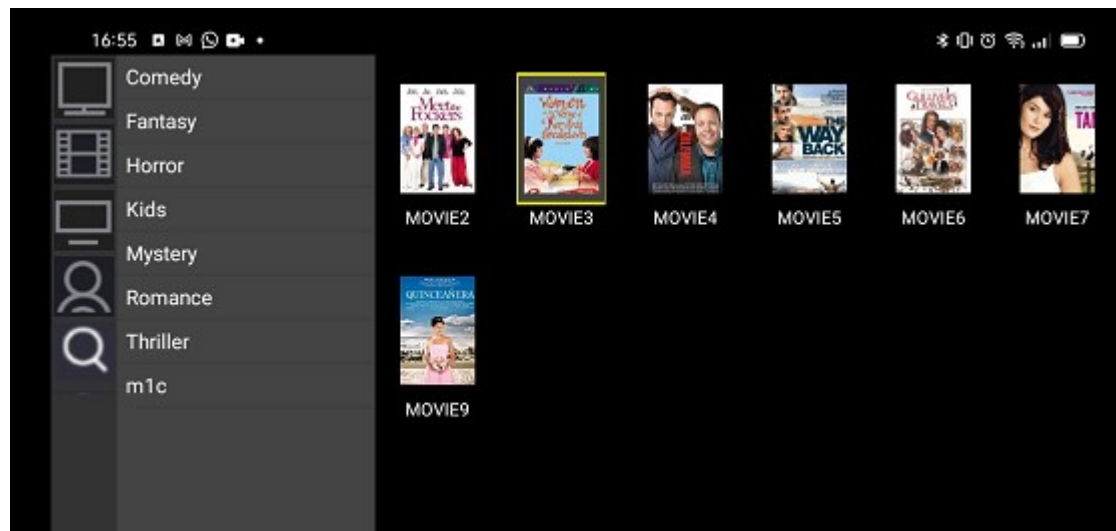
- When one player starts to play the channels or movies of the category, the player shows password dialog as below:




7 Movies and Series

Movies:

- Select  in main menu to get all movies with categories as below:



Series:

- Select  in main menu to get all series with categories as below:

