



Ezhometech P2P Tutorial

P2P solution for all streaming servers

Revision: 01/06/2022

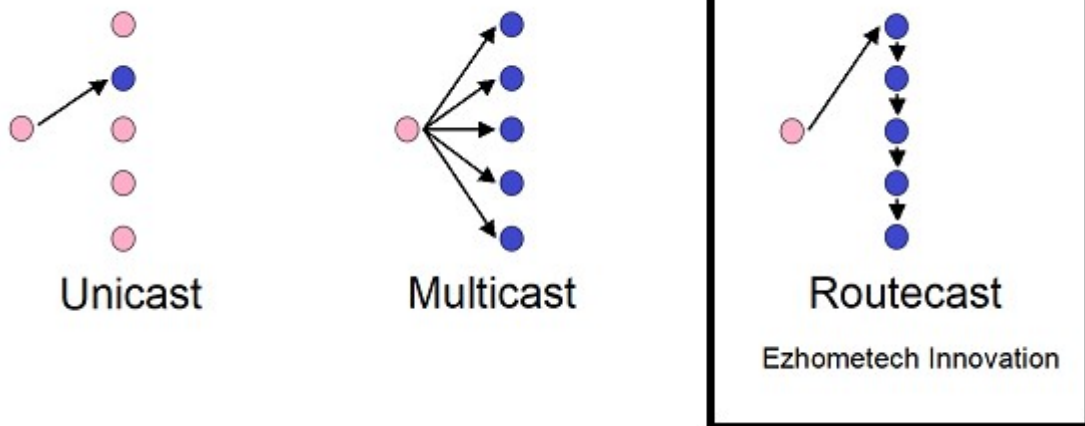
Content

1 Overview of Ezhometech Routecast.....	3
1.1 Related Information.....	3
2 Ezserver.....	4
3 Ezserver Panel Setting.....	5
4 Ezserver Routecast Player.....	6
5 IPTV Smarter Setting.....	7
6 Routecast Verification Testing.....	9
7 P2P for all streaming servers.....	10

1 Overview of Ezhometech Routecast

Ezhometech Routecast solution includes **Ezserver** and **Ezserver Routecast Player** can play automatically channels from Ezserver or Ezserver Routecast Player via Internet

1. **Ezserver:** Act Routecast video server
2. **Ezserver Routecast Player:** Routecast video player



1.1 Related Information

Ezserver Forum:

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

Ezserver Server API website

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

Ezserver Client API website:

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

Ezserver User Guide website:

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

Ezserver Routecast Player User Guide:

http://www.ezhometech.com/document/Ezserver_External_Player_User_Guide.pdf

2 Ezserver

Ezserver includes OTT / IPTV panel, Streaming server and Stun server for Routecast 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.

Stun server:

- **Routecast connection:** allows clients to find out their public address, the type of NAT they are behind and the Internet side port associated by the NAT with a particular local port.

Hardware Requirement:

- **Min. Requirement:** Dual-Core, 8GB RAM, 1GB Network card.

Software Requirement:

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

3 Ezserver Panel Setting

Routecast Setting:

- Enable Routecast option and open Routecast port in server router.

Routecast Streaming Setting: ☒ 

Routecast Cmd Port Routecast Data Port

Add 2 users:

- Add annie user with max connection value 1.

New User

User at	<input type="text" value="3"/>	User Name	<input type="text" value="annie"/>
Password	<input type="text" value="1234"/>	Rating Password	<input type="text" value="1234"/>
Group	<input type="text" value="golden"/>	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"/>	MAC ID	<input type="text"/>

- Add robert user with max connection value 1.

New User

User at	<input type="text" value="4"/>	User Name	<input type="text" value="robert"/>
Password	<input type="text" value="1234"/>	Rating Password	<input type="text" value="1234"/>
Group	<input type="text" value="golden"/>	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"/>	MAC ID	<input type="text"/>

4 Ezserver Routecast Player

Ezserver Routecast Player is not standalone player, it is embeded into popular App.

Supported App:

- **IPTV Smarter**
- **IPTV Extreme**
- **IPTV Player**
- **GSE Smater IPTV**

Intent URL Format: App calls Ezserver Routecast Player by intent filter is http://

- **Syntax 1: http://IP:Port/live/username/password/x.ts**
 - ✧ Ex1. http://188.177.119.111:8000/live/test/1234/1.ts
 - ✧ Ex2. http://188.177.119.111:8000/live/test/1234/2.ts
- **Syntax 2: http://IP:Port/ch_name?u=username:p=password**
 - ✧ Ex1. http://188.177.119.111:8000/TV1?u=test:p=1234
 - ✧ Ex2. http://188.177.119.111:8000/ TV2?u=test:p=1234

Hardware Requirement:

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

Software Requirement:

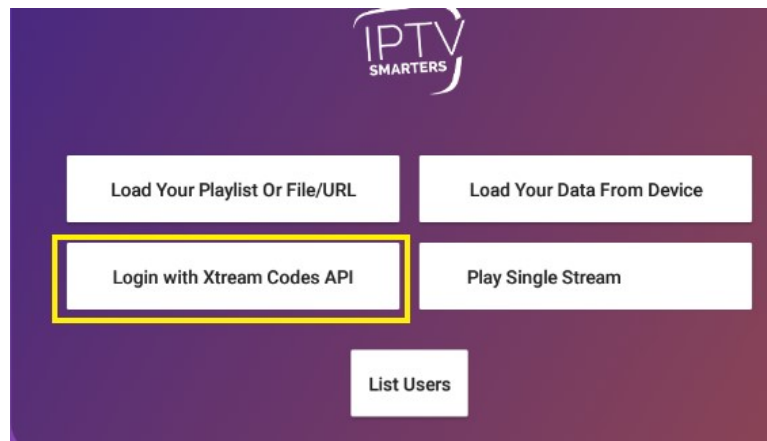
- **Android 5.0+**

5 IPTV Smarter Setting

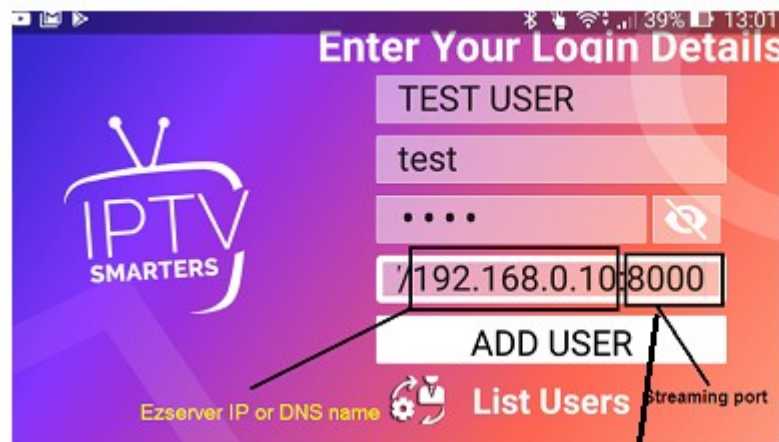
Add one user and Ezserver Routecast Player into IPTV Smarter Setting

Add one user

- **Select Xstream API**



- **Add User Login Details**



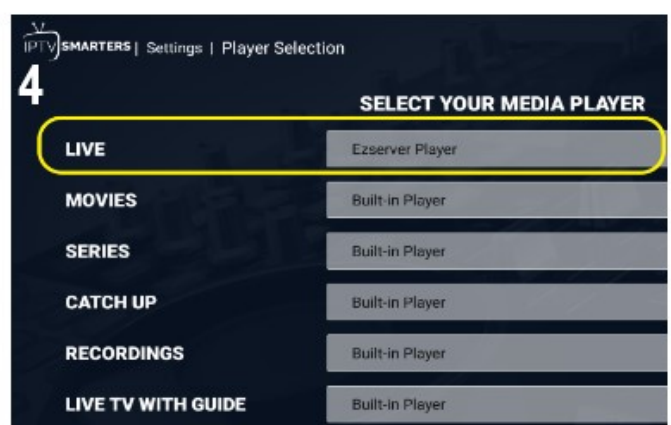
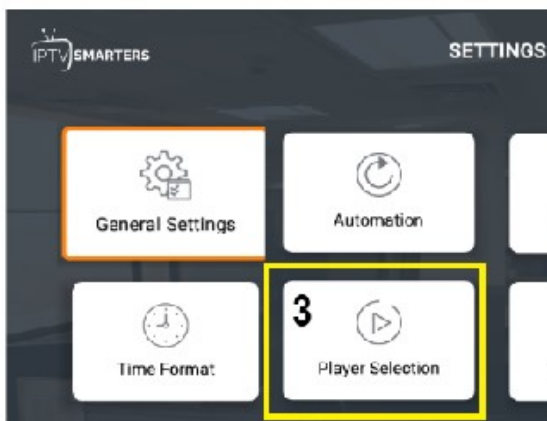
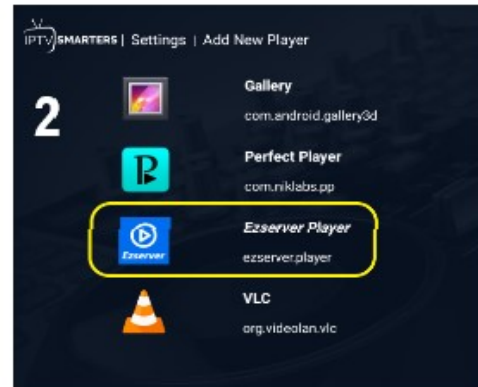
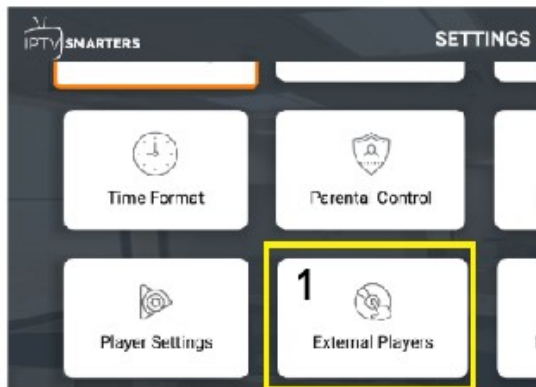
Save

Unicast Streaming Setting:

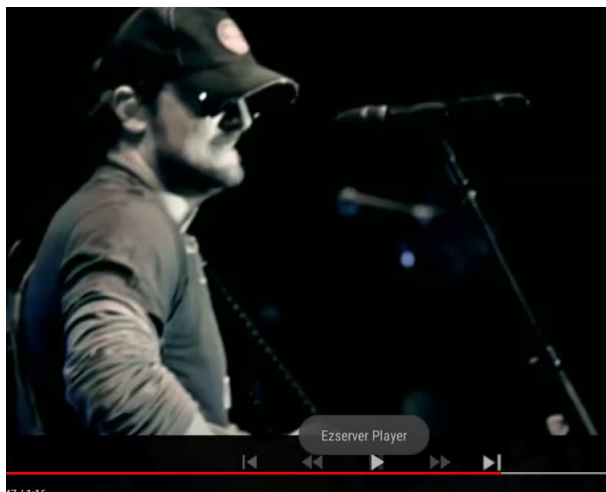
- | | | |
|----------------|-------|--|
| 1. Panel port: | 18000 | --- Administrator Panel Port |
| 2. API port: | 17000 | --- Application Program Interface Port |
| 3. HTTP port: | 8000 | --- HTTP Streaming Port for players |

IPTV Smarter Setting:

- **Add External Player and select it in Live option**



- **Play channel in FULL screen mode**



- **Change channel by NEXT/PREV Button**

6 Routecast Verification Testing

User IP:

- Differnet users from different public IP.
- Play same channel.

Click Ezserver Panel: Active connection to check their status as below:

No.	User	Session	User Agent	Watching CH/Moive	Starting Time	IP	MAC ID	Country	Protocol
1	annie	4	Ezserver Player	TV1 (1)	2021/08/29 09:58:46 (0:00:12)	111.250.36.210	9c5c8e10be2d	TW	HTTP
2	robert	5	Ezserver Player	TV1 (1)	2021/08/29 09:58:54 (0:00:04)	114.34.8.11	44d3ade87d73	TW	P2P

Showing 0 to 0 of 0 connections

- Protocol HTTP means streaming from Ezserver.
- Protocol P2P means streaming from Ezserver Routecast Player instead of Ezserver

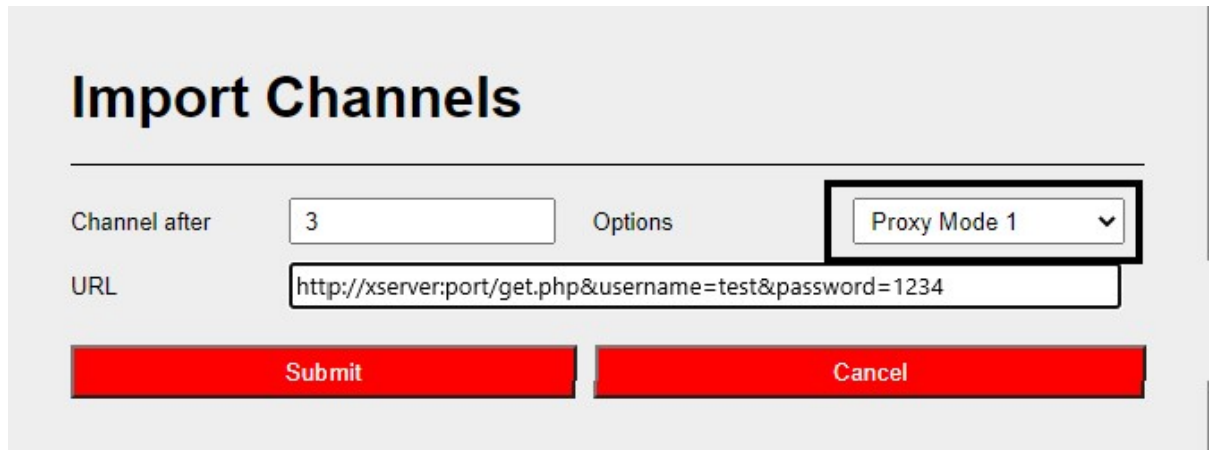
7 P2P for all streaming servers

Ezserver acts P2P stun server for all streaming servers via Routecast. All download streams are from streaming servers instead of Ezserver:

Login Ezserver Panel and Click Channel button.

Use import button:

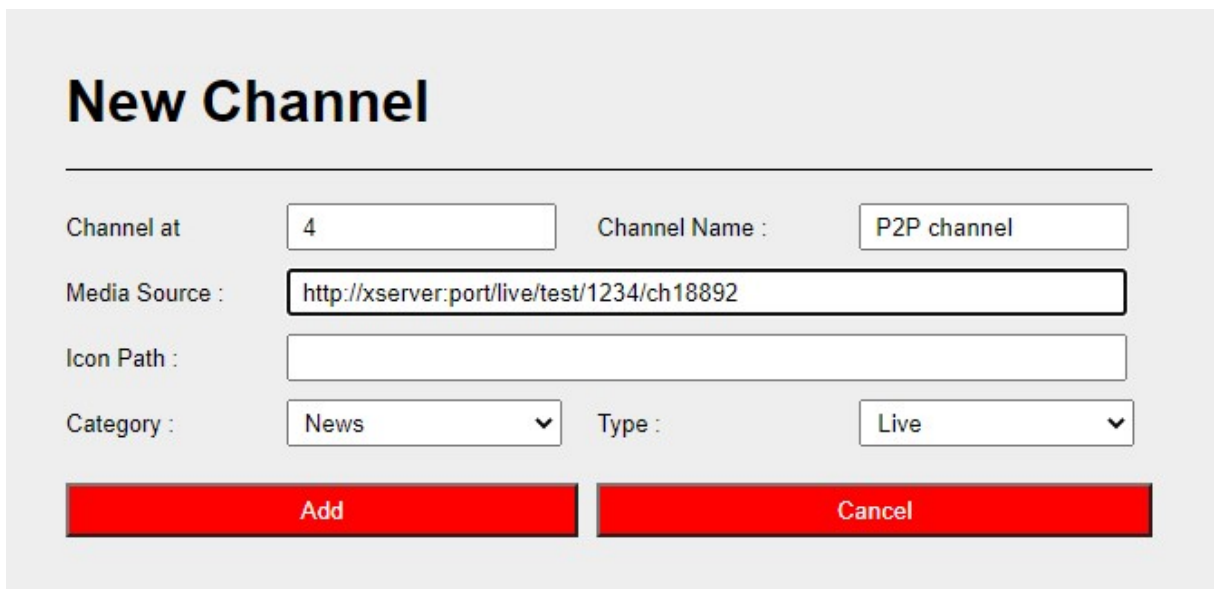
- Import all channels with Proxy mode = 1 from streaming servers by get.php API.



The screenshot shows the 'Import Channels' form. It has a title 'Import Channels' at the top. Below the title, there are two rows of input fields. The first row has 'Channel after' with a text box containing '3', and 'Options' with a dropdown menu showing 'Proxy Mode 1'. The second row has 'URL' with a text box containing 'http://xserver:port/get.php&username=test&password=1234'. At the bottom, there are two red buttons: 'Submit' and 'Cancel'.

Use Add button:

- Add one channel from a streaming server



The screenshot shows the 'New Channel' form. It has a title 'New Channel' at the top. Below the title, there are four rows of input fields. The first row has 'Channel at' with a text box containing '4', and 'Channel Name :' with a text box containing 'P2P channel'. The second row has 'Media Source :' with a text box containing 'http://xserver:port/live/test/1234/ch18892'. The third row has 'Icon Path :' with an empty text box. The fourth row has 'Category :' with a dropdown menu showing 'News', and 'Type :' with a dropdown menu showing 'Live'. At the bottom, there are two red buttons: 'Add' and 'Cancel'.

- Click Edit icon to Set Proxy mode = 1

P2P channel

On Demand	<input type="checkbox"/>	HLS	<input type="checkbox"/>
Channel SID	<input type="text"/>	EPG Channel ID	<input type="text" value="TV1"/>
User Agent	<input type="text" value="Ezhometech(Ezserver/"/>	Bitrate Tolerance	<input type="text" value="0"/>
Catch Up Days	<input type="text" value="0"/>	Proxy Mode	<input type="text" value="1"/>
Input Adapter	<input type="text" value="127.0.0.1"/>	AES Encryption	<input type="checkbox"/>
2nd URL	<input type="text"/>		
3rd URL	<input type="text"/>		

SaveCancel