



Ezhometech P2P Tutorial

P2P Solution

Revision: 04/23/2022



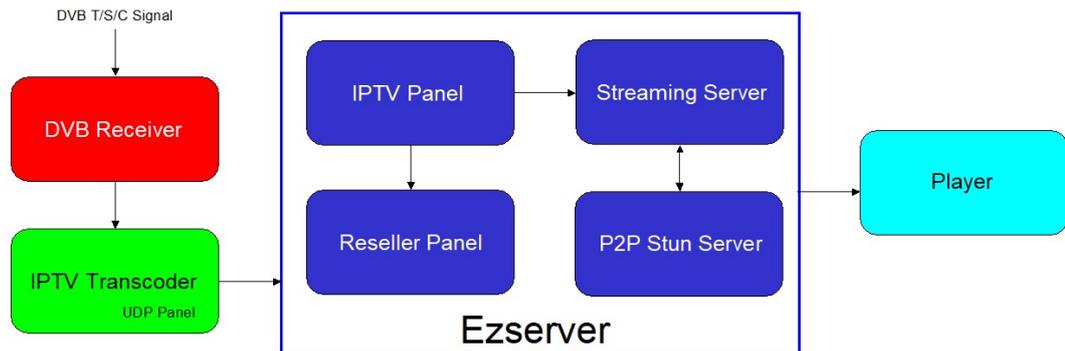
Content

1 Overview of Ezhometech P2P Panel	3
1.1 Related Information.....	3
2 Installation and License activation	4
3 Start / Restart / Shutdown	5
4 Administrator Panel.....	6
5 P2P Panel Setting	7
6 Ezserver P2P Player with other IPTV Player	8
7 Ezserver Player	11
8 P2P Verification Testing	12
9 P2P for all streaming servers	13

1 Overview of Ezhometech P2P Panel

Ezhometech P2P Panel powered by Ezserver reduces server download bandwidth.

1. **Ezserver:** Act P2P video server
2. **Ezserver P2P Player:** An P2P Streaming Player with other IPTV Player
3. **Ezserver Player:** An P2P Player that has its User Interface..



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 Player User Guide:

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

2 Installation and License activation

Windows version:

- Download ezserver_enterprise.zip from the checkout web page..
- Refer Readme.txt in zip file to run Ezserver.exe.
- Email us the ezserver_enterprise/serial_number.txt (size: 74bytes) to active ezserver license.

Linux:

- Download install.sh from the checkout web page.
- ./install.sh with installation password
- Email us the ezserver_enterprise/serial_number.txt (size: 74bytes) to active ezserver license.

Note: Windows version with multiple network cards

- Open ezserver_config.txt and edit network_interface value..
- network_interface value
 1. eth0: the first card
 2. eth1: the 2nd card
 3. eth2: the 3rd card.
- Delete serial_number.txt and double click Ezserver.ext to create new serial_number.txt to us for license reactivation.

3 Start / Restart / Shutdown

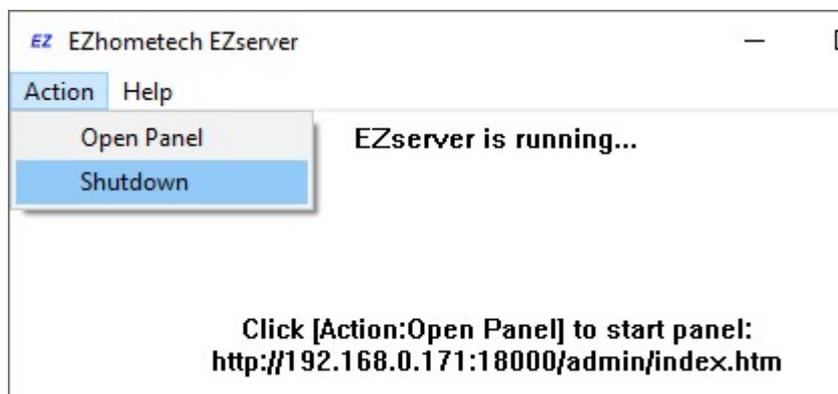
Windows version:

- Start:
 - Double Click Ezserver.exe
- Restart: Login Panel and Click the below button



wait 30~60 seconds to relogin panel.

- Shutdown:



Linux: ezserver at /home/ezserver_enterprise folder

- Start:
 - `cd /home/ezserver_enterprise`
 - `./start.sh`
- Restart:
 - `cd /home/ezserver_enterprise`
 - `./restart.sh`
 - or Login Panel and Click the below button

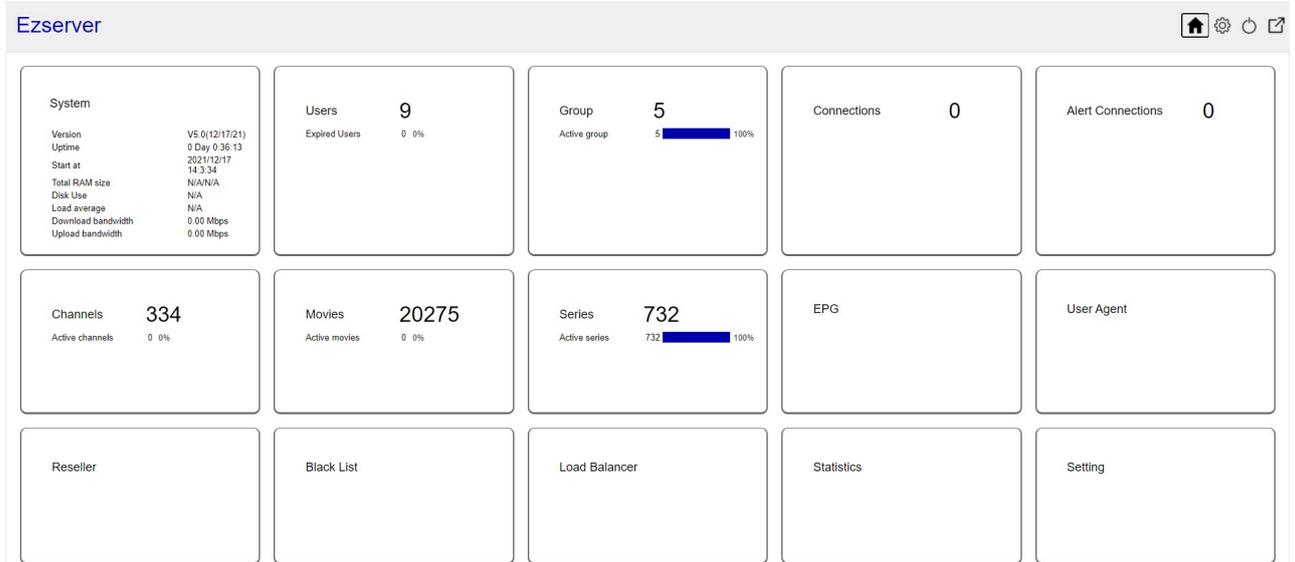


wait 30~60 seconds to relogin panel.

- Shutdown:
 - `cd /home/ezserver_enterprise`
 - `./shutdown.sh`

4 Administrator Panel

Input URL: <http://domain:port/admin/index.htm> in Chrome



The screenshot shows the Ezserver Administrator Panel dashboard. The dashboard is organized into a grid of 15 panels. The top row contains: System (Version: V5.0(12/17/21), Uptime: 0 Day 0:36:13, Start at: 2021/12/17 14:3:34, Total RAM size: N/A/N/A, Disk Use: N/A, Load average: N/A, Download bandwidth: 0.00 Mbps, Upload bandwidth: 0.00 Mbps), Users (9, Expired Users: 0 0%), Group (5, Active group: 5 100%), Connections (0), and Alert Connections (0). The second row contains: Channels (334, Active channels: 0 0%), Movies (20275, Active movies: 0 0%), Series (732, Active series: 732 100%), EPG, and User Agent. The third row contains: Reseller, Black List, Load Balancer, Statistics, and Setting.

- **User management:** create, modify and delete users.
- **Group management:** create, modify and delete groups.
- **Channel management:** create, modify, delete or import channels.
- **Movies management:** create, modify, delete or import movies.
- **Series management:** create series.
- **EPG management:** create, modify, delete or import EPG programs.
- **User Agent Protection:** Add, delete User Agent for Player protection
- **Reseller management:** create, modify and delete Reseller includes Supper Reseller.
- **Blacklist management:** show and delete Locked IP.
- **Load Balancer management:** create, modify, and delete balancers.
- **Statistics:** show Channel and Movies watched information.
- **Setting**

Tips:

Use [http:// domain:port](http://domain:port) instead of [http:// domain:port/admin/index.htm](http://domain:port/admin/index.htm) in Chrome

- . open ezserver_config.txt
- . replace **startmenu=index.htm** by **startmenu=admin/index.htm**
- . open admin/index.htm
- . replace `<script src="menubar.js"></script>` by `<script src="admin/menubar.js"></script>`
- . replace `<script src="menu.js"></script>` by `<script src="admin/menu.js"></script>`
- . restart ezserver

5 P2P Panel Setting

P2P Setting:

- **Enable P2P option and open P2P port in server router.**

P2P Streaming Setting: 

P2P Cmd Port P2P 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"/>

6 Ezserver P2P Player with other IPTV Player

Ezserver P2P Player is not standalone player, it is embedded into popular IPTV App.

Supported App:

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

Intent URL Format: App calls Ezserver P2P 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:

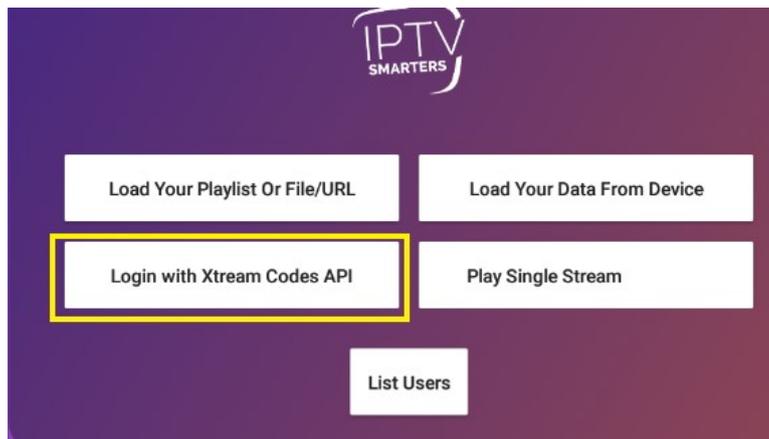
- **Android 5.0+**

IPTV Smarter Example

install Ezserver P2P Player into your android device, then open IPTV Smarter to add one user and select Ezserver Player into IPTV Smarter Setting

Add one user

- **Select Xtream API**



- **Add User Login Details**



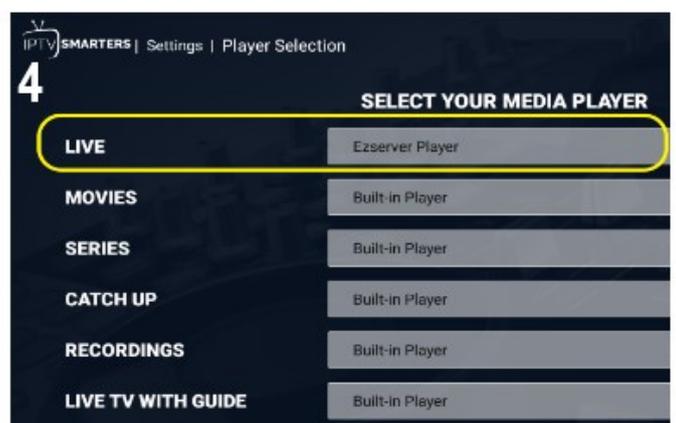
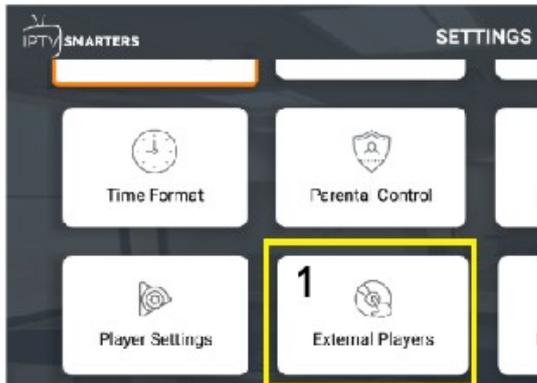
Save

Unicast Streaming Setting:

- | | | |
|----------------|------------------------------------|--|
| 1. Panel port: | <input type="text" value="18000"/> | --- Administrator Panel Port |
| 2. API port: | <input type="text" value="17000"/> | --- Application Program Interface Port |
| 3. HTTP port: | <input type="text" value="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**

7 Ezserver Player

Ezserver Player is an **P2P Player** that plays channels, movies and series from Ezserver for internet users. Additionally, it is also a **multicast encryption player** for local network users.

Features:

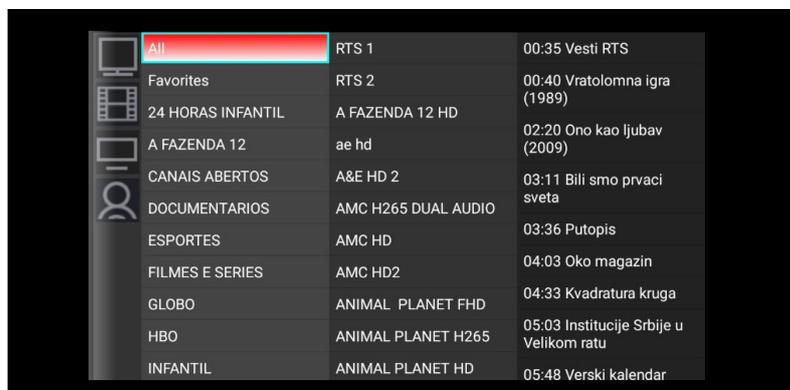
- **TV, Movie and Series**
- **Support Youtube Channel Links**
- **EPG and Catch up TV**
- **Parent Control of adult content**
- **MAC ID Protection**
- **Channel Video Format: MPEG2/H264 Transport Stream**
- **Channel Audio Format: MP3/AAC, ADTS Stream**
- **Movie Format: MP4, MKV**

Hardware Requirement:

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

Software Requirement:

- **Android 5.0+**



8 P2P Verification Testing

User IP:

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

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

Connections		P2P Flow: Ezserver -> annie -> robert -> test					
No.	User	P2P Seed	Session	User Agent	Watching CH/Moive	IP	Protocol
1	annie	Occupied	26	Ezserver Player	TV1 (1)	114.34.8.11	HTTP
2	robert	annie and Occupied	27	Ezserver Player	TV1 (1)	111.250.0.49	P2P
3	test	robert and Available	29	Ezserver Player	TV1 (1)	114.34.8.11	P2P

Showing 1 to 3 of 3 connections

- **Protocol**
 - ✧ HTTP : streaming from Ezserver.
 - ✧ P2P : streaming from Ezserver P2P Player instead of Ezserver
- **P2P Seed**
 - ✧ Unavailable: Not available for P2P upload (**download bitrate too low**).
 - ✧ Avaialable: Avaialble for P2P upload
 - ✧ Occupied: Get Streams from Ezserver and P2P uploaded.
 - ✧ SeedName and Available: Get Streams from SeedName and Avaialble for P2P upload.
 - ✧ SeedName and Occupied: Get Streams from SeedName and P2P uploaded.
- **Player Status**
 - ✧ Click Remote control OK button or Touch Screen to get the below:

Download / Upload Bitrate



DW: 640Kbps, UP: not avaiable



DW: 1090Kbps, UP: available



DW: 6125Kbps, UP: 3720Kbps to one player

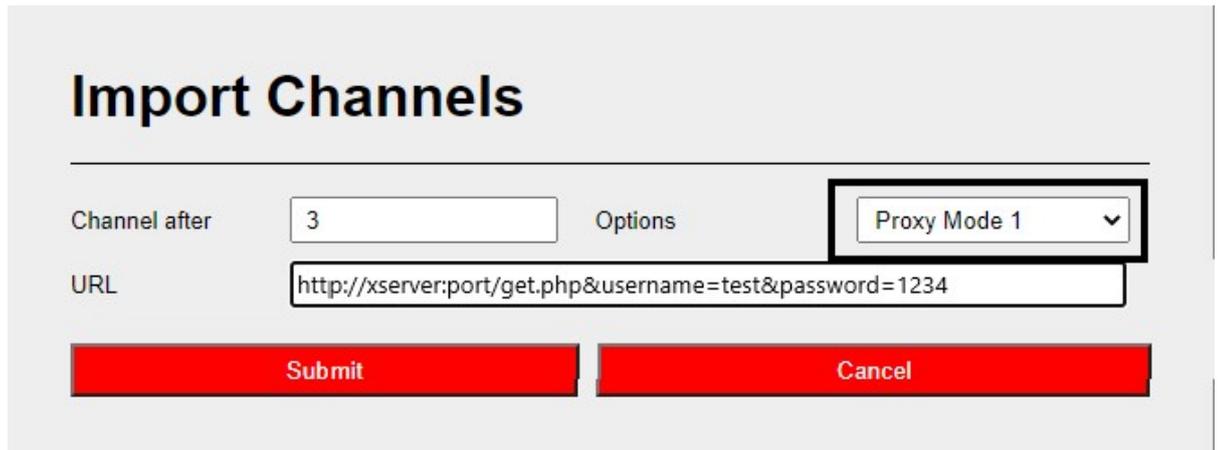
9 P2P for all streaming servers

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.



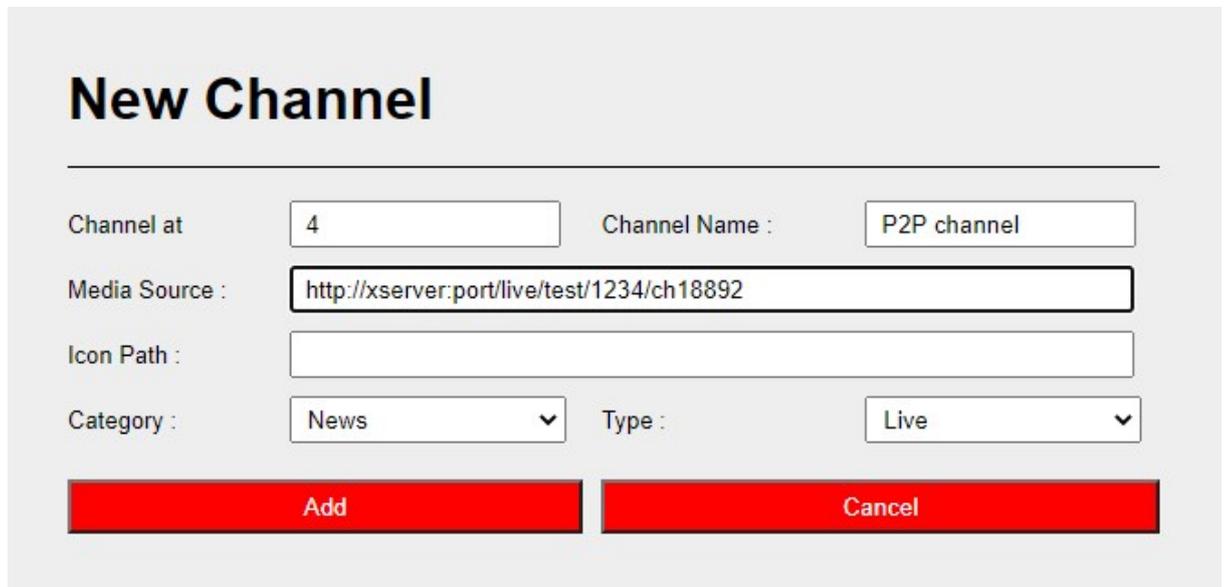
Import Channels

Channel after Options

URL

Use Add button:

- Add one channel from a streaming server



New Channel

Channel at Channel Name :

Media Source :

Icon Path :

Category : Type :

- 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"/>		