



Ezserver P2P Solution

Enrich IPTV Smarter with P2P solution

Revision: 06/16/2022



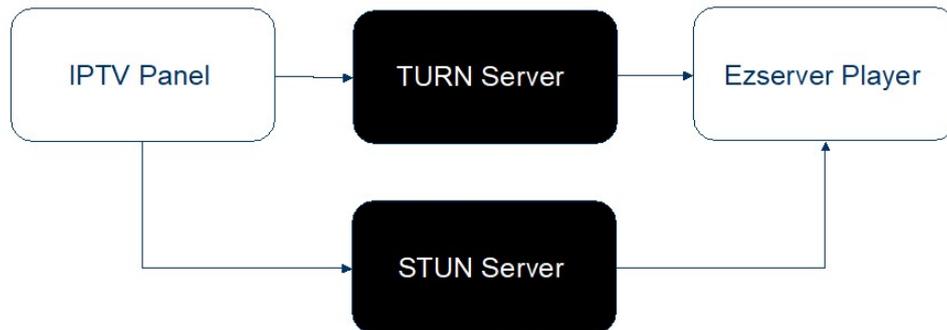
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1 Overview

Ezhometech P2P Panel powered by Ezserver reduces server download bandwidth.

1. **Ezserver:** Act Stun Server that works with full-cone NAT,(Address)-restricted-cone NAT.Port-restricted cone NAT. Additional, it acts TURN Server with Symmetric NAT.
2. **Ezserver P2P Player:** Act P2P external player with IPTV Smarter.



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

NAT Type

https://en.wikipedia.org/wiki/Network_address_translation

2 Installation

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

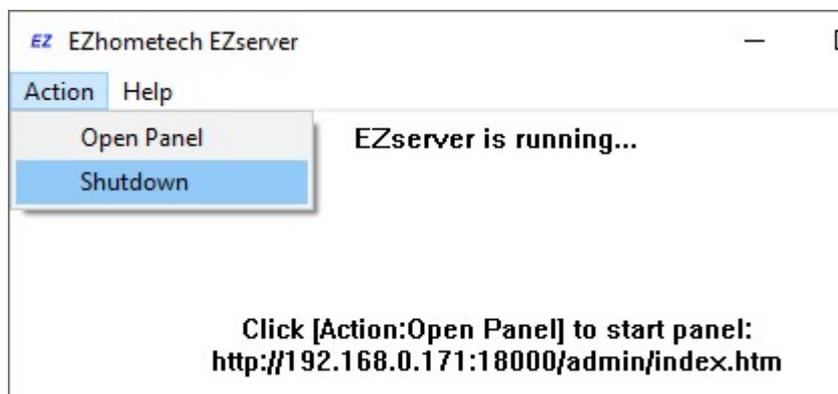
Windows version:

- 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

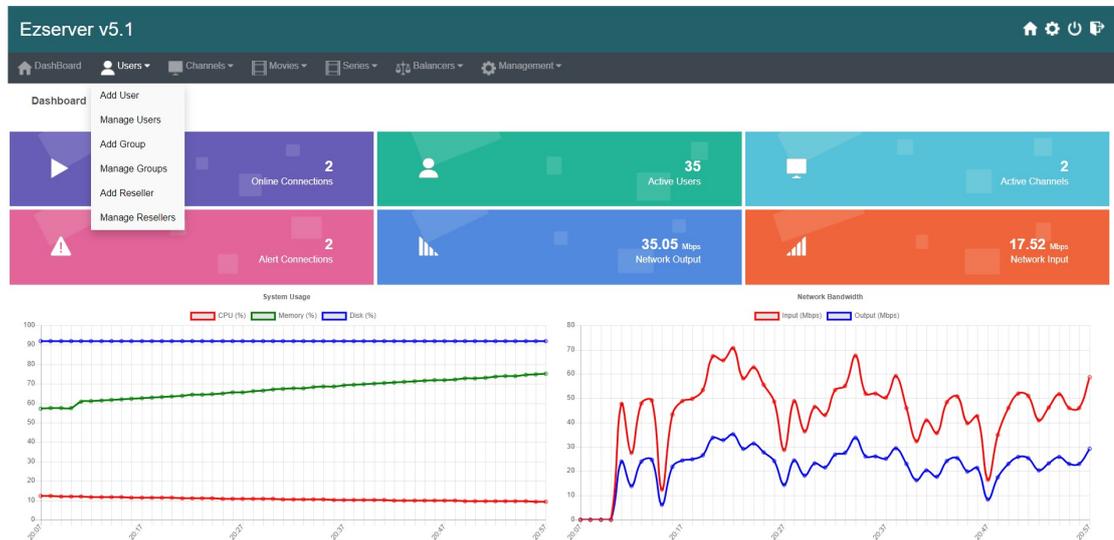


wait 30~60 seconds to relogin panel.

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

4 Administrator Panel

Input URL: **http://domain:port** in Chrome



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

5 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

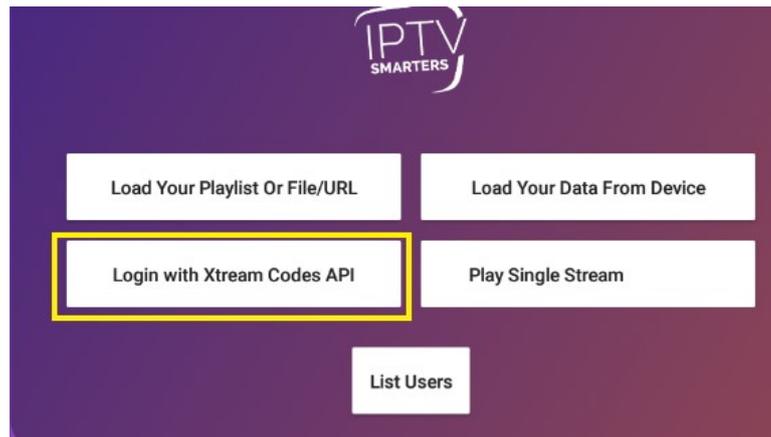
User at	<input type="text" value="4"/>	User Name	<input type="text" value="robert"/>
Password	<input type="text" value="1234"/>	Rating Password	<input type="text" value="1234"/>
Group	<input type="text" value="golden"/>	Level	<input type="text" value="User"/>
Expired Time	<input type="text" value="1 month"/>	Connection Limit	<input type="text" value="1"/>
IP	<input type="text"/>	MAC ID	<input type="text"/>

6 IPTV Smarter Setting

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 Xstream API**



- **Add User Login Details**



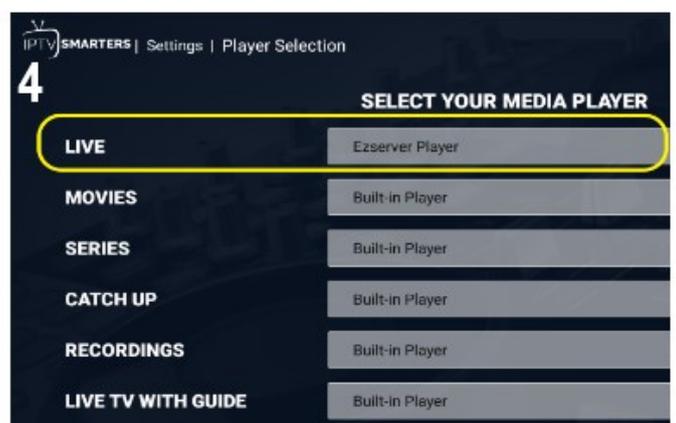
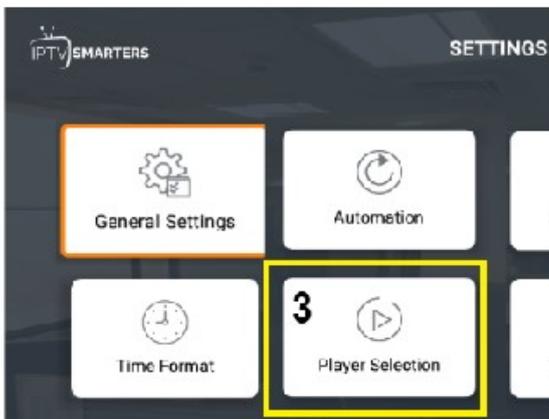
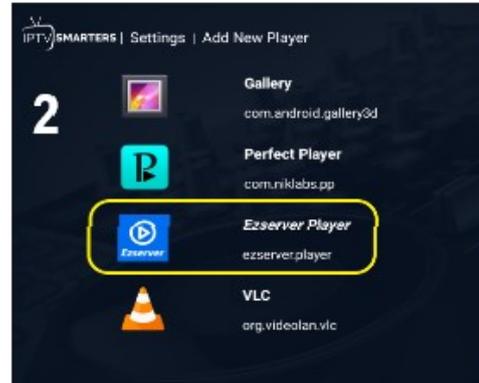
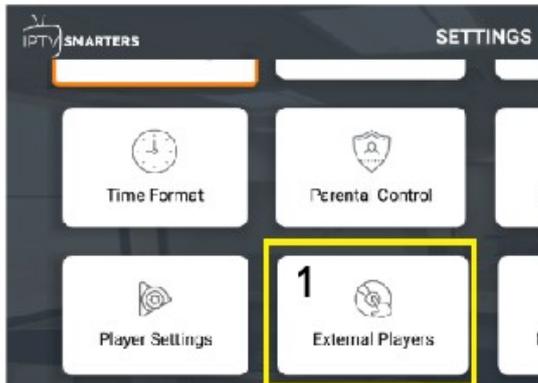
Save

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 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 : Ezserver. TURN server: video streaming from Ezserver.**
 - ✧ **P2P : Ezserver STUN server: video streaming from one Player**
- **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

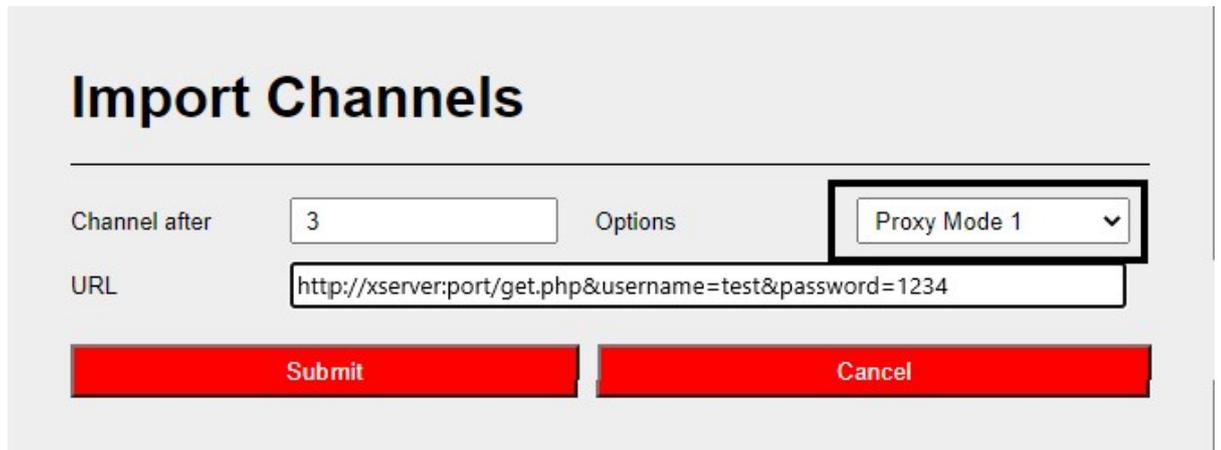
8 Xstream UI Import (Optional)

This step is optional to import streams from Xstream UI by Proxy mode. **Ezserver acts P2P stun server and Proxy server for Xstream UI.** All download streams are from Xstream UI 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.



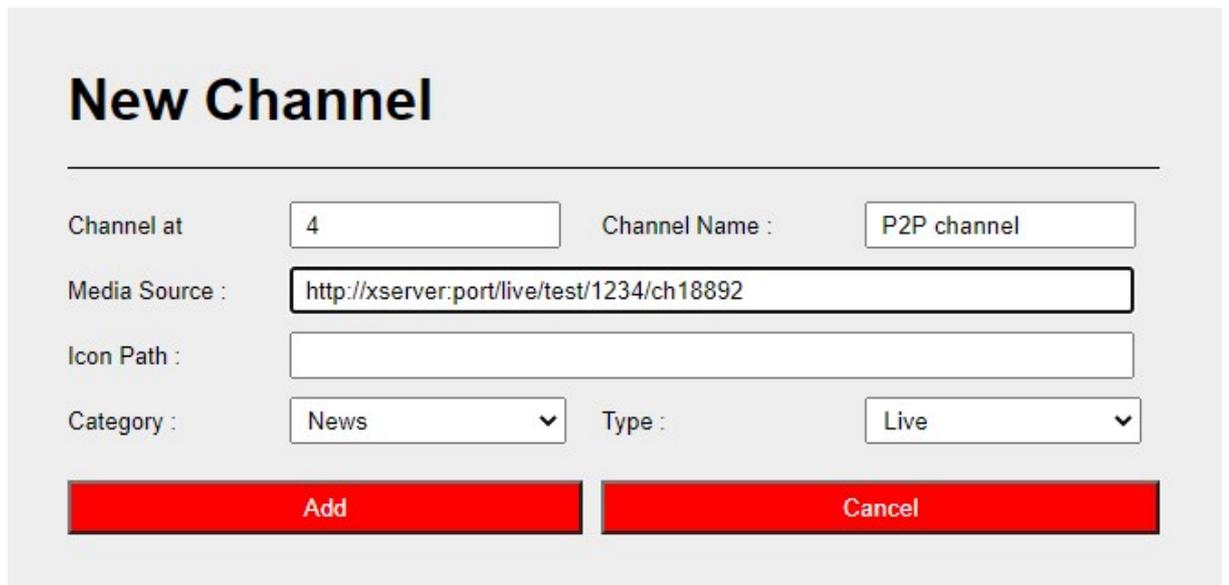
Import Channels

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"/>		