Ezserver P2P Solution

Save Server Download Bandwidth

Revision: 07/20/2022

Content
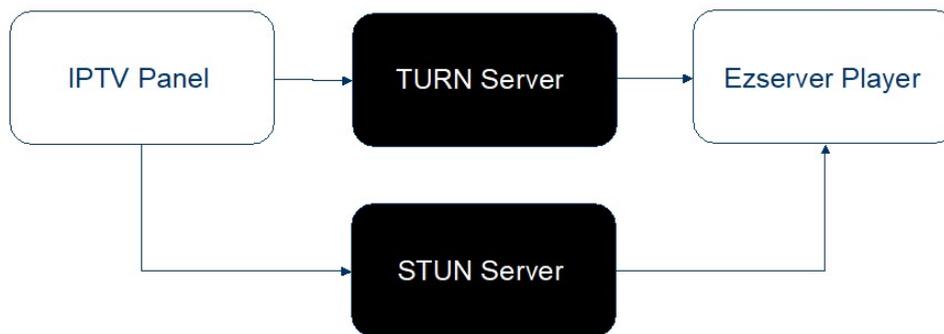
1 Overview

Ezserver P2P Solution powered by Ezserver reduces server download bandwidth. It contains the below:

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 Player:** A P2P 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

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.
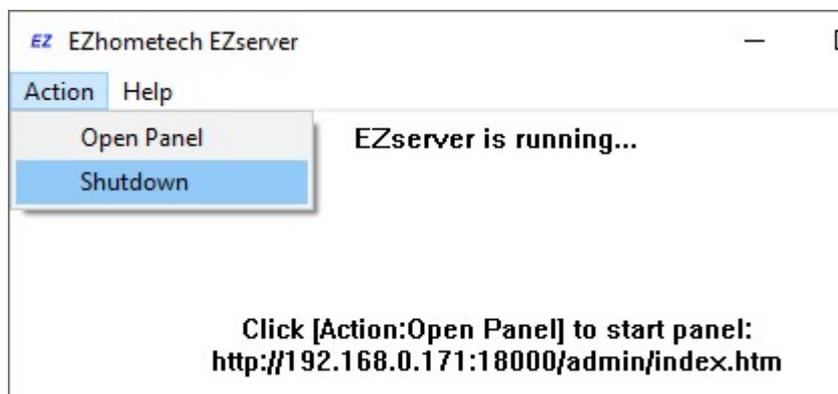
3 Start / Restart / Shutdown

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
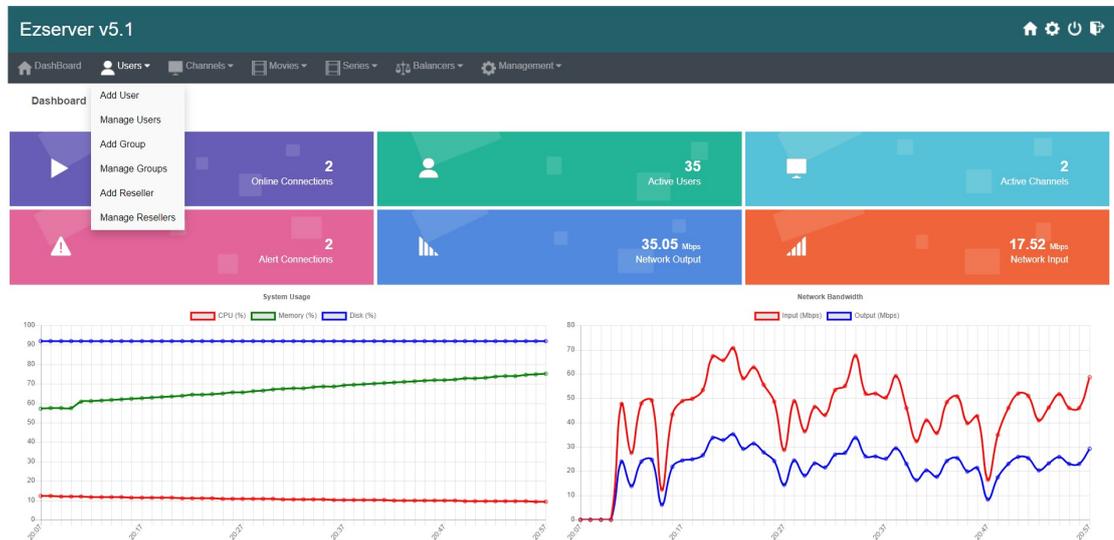 - or Login Panel and Click the below button

  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 P2P Setting

P2P Setting:

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

P2P Streaeming Setting: [toggle on]

| P2P Cmd Port | 17030 | P2P Data Port | 17040 |

Add 2 android devices:

- **Add annie with max connection value 1.**

New Android Device

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

| Add | Cancel |

- **Add robert with max connection value 1.**

New Android Device

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

| Add | Cancel |

6 Ezserver Player

Ezserver Player is an **P2P Player** that plays channels, movies and series from Ezserver for internet users.

Features:

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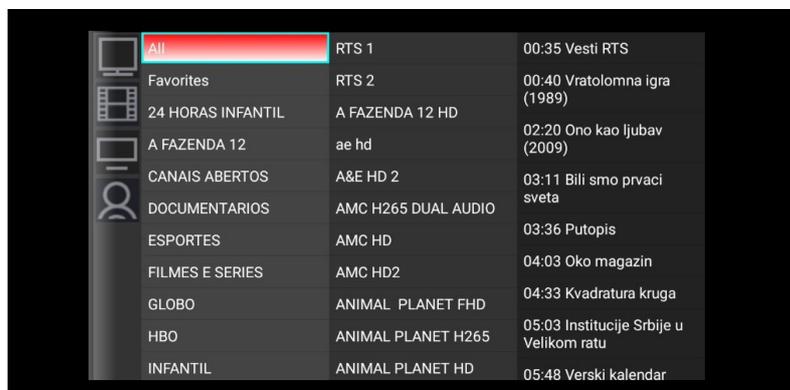- **Support Youtube Channel Links**
- **EPG and Catch up TV**
- **Parent Control of adult content**
- **MAC ID Protection**
- **Channel Video Format: MPEG2/H264 Transport Stream**
- **Channel Audio Format: MP3/AAC, ADTS Stream**
- **Movie Format: MP4, MKV**

Hardware Reqirement:

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

Software Reqirement:

- **Android 5.0+**

7 P2P Player testing example

Device IP:

- **Differnet devices needs have different public IP.**
- **Devices play same channel to create P2P connections**

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 Status**
    - ◇ **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

⏮ ◀◀ ⏸ ▶▶ ▶⏸ 640 K / NA	DW: 640Kbps, UP: not avaialble
⏮ ◀◀ ⏸ ▶▶ ▶⏸ 1090 K	DW: 1090Kbps, UP: available
⏮ ◀◀ ⏸ ▶▶ ▶⏸ 6125 K/ 3720 K	DW; 6125Kbps, UP: 3720Kbps to one player