

Ezserver VideoCloud Tutorial

Revision: 03/26/24



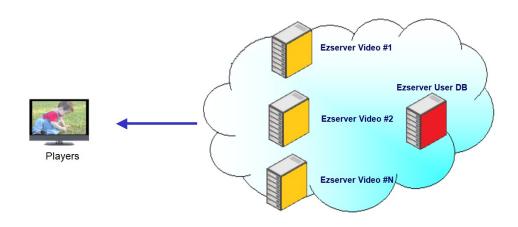
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1 Overview

Cloud video and user servers



Create Your Video Cloud for DDoS Attacks

Ezserver VideoCloud is a Platform as a Service (PaaS) that empowers developers to distribute users, channels, movies, and series across decentralized servers, enhancing the security of user data and content. Additionally, it utilizes the IP addresses of decentralized servers to dynamically assign server IP addresses when delivering content to players. It uses **Blockchain technology** instead of loader balance, CDN technology.

Ezserver utilizes decentralized blockchain technology to distribute user and content databases across multiple servers. This enhances security by preventing hackers from stealing user data or content and provides protection against Distributed Denial of Service (DDoS) attacks.

The User Node serves as the cornerstone for managing user information. It not only safeguards user data but also provides a seamless and user-centric experience, ensuring the utmost privacy and security for every individual within the system.

The Content Node, on the other hand, is the heart of content delivery, capable of streaming both channels and movies with unparalleled speed and reliability. Ezserver ensures that your content is delivered to your audience with exceptional quality and efficiency.

Privacy is of utmost importance in the digital age, and this is where the Reverse Proxy Node comes into play. It acts as a guardian, concealing user identities and ensuring their online activities remain confidential, offering peace of mind in an era where data security is a top



concern.

Additionally, the Proxy Node functions as a versatile VPN server, further fortifying the anonymity of both User and Content Servers. By masking their origins and encrypting data, it creates a secure environment for seamless and confidential content delivery.

Requirement:

Minimum Server Requirement:

• Linux: Ubuntu 20.04(Recommended), Debian, Centos

Windows: 64-bitsCPU: 4v CoreRAM: 8GB

• Storage: 160 GB

Bandwidth: 1Gbps unmetered

Related Information:

Ezserver Official website:

http://www.ezhometech.com/

Ezserver configuration tutorial:

https://www.ezhometech.com/document/Ezserver VideoCloud Configuration.pdf

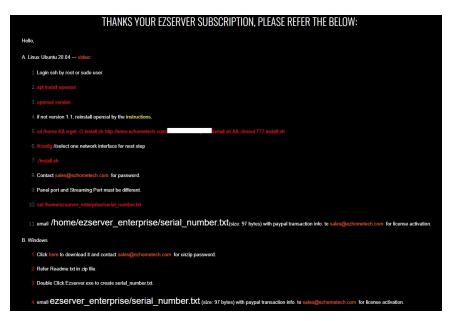
Ezserver User Guide:

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



1.1 Installation and License activation

Get checkout web page after you buy Ezserver License and contact us for installation password.



Windows version:

- Download ezserver_blockchain.zip from the checkout web page.
- Refer Readme.txt in zip file to run Ezserver.exe.
- Email us the ezserver_blockchain/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
 - eth0: the first card
 - eth1: the 2nd card
 - eth2: the 3rd card.
- Delete serial_number.txt and double click Ezserver.ext to create new serial_number.txt to us for license reactivation.

Linux:

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



1.2 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 Version: ezserver at /home/ezserver_blockchain folder

- Start:

 - ♦ ./start.sh
- Restart:

 - ♦ cd /home/ezserver_blockchain
 - ♦ ./restart.sh
 - or Login Panel and Click the below button



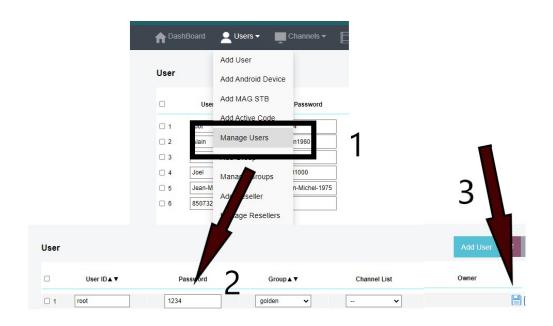
wait 30~60 seconds to relogin panel.

- Shutdown:

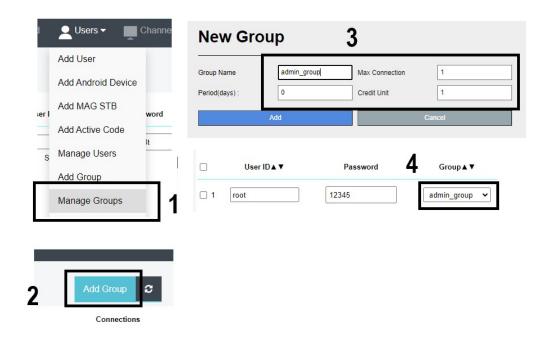


1.3 Admin Password / Group

Passowrd Settting



Group Setting





1.5 Software Update

- sudo -i
- cd ezserver_blockchain
- ./patch.sh
- input password
- ./restart.sh

1.6 User Authorization for Streaming URL

- Enable user_authorization in ezserver_blockchain/ezserver_config.txt
 - user_authorization=1: Streaming URL with token or username/password.
 - user_authorization=0: Streaming URL without username/password
 - □ Add username "free" with any password in User List to get content URLs.



2.Admin Panel

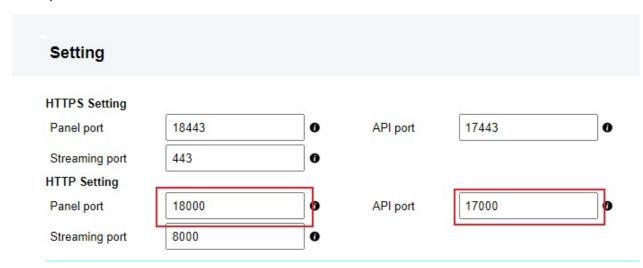
HTTP Protocol:

Admin Panel Input URL: http://domain:panel_port

Ex. http://192.168.0.9:18000/

Reseller Panel URL: http://domain:API_port/reseller/index.htm

Ex. http://192.168.0.9:17000/reseller/index.htm



HTTPS Protocol: (Support Ubuntu 20.04 only)

Admin Panel Input URL: http://domain:https panel port

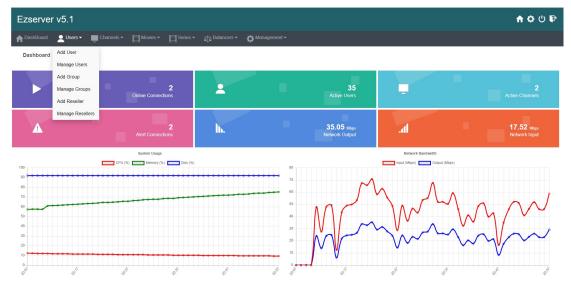
Ex. http://192.168.0.9:18443/

Reseller Panel URL: http://domain:https_API_port/reseller/index.htm

Ex. http://192.168.0.9:17443/reseller/index.htm







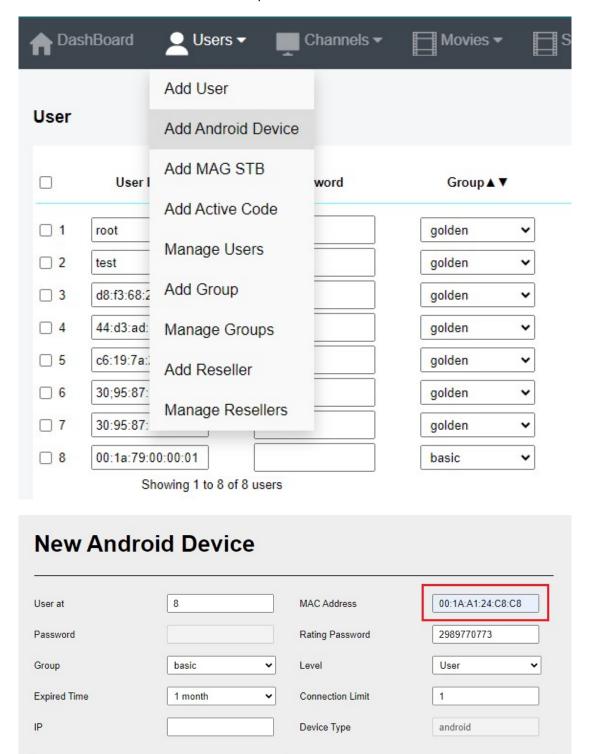
- User / Group / Reseller management: create, modify and delete users, groups,
 Reseller.
- Channel / EPG management: create, modify, delete or import channels,, epg.
- Movies management: create, modify, delete or import movies.
- Series management: create series.
- User Agent Protection: Add, delete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



2.1 User Management

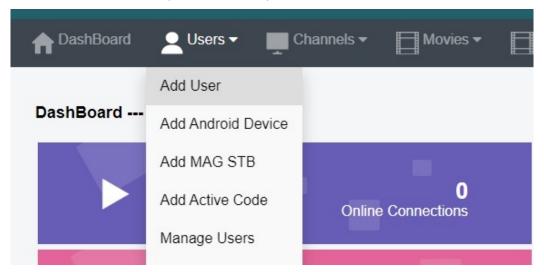
There are 3 options for player activation.

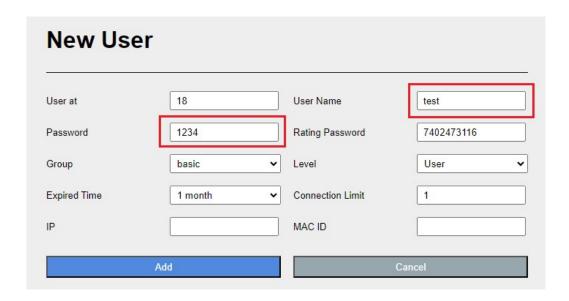
Click "Add Android Device" and Input Device Mac Address





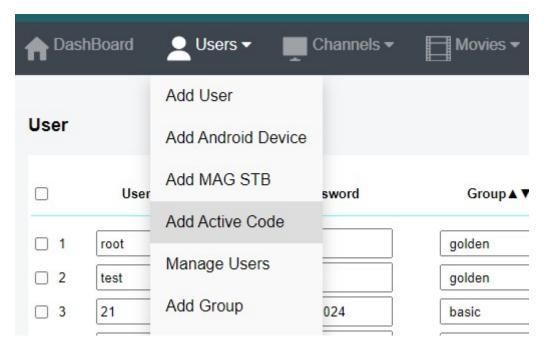
• Click "Add User" and Input User name / password







• Click "Add Active Code"





- Active Code is auto geenerated by system random generator.
- ♦ Each active code is limited by one device.



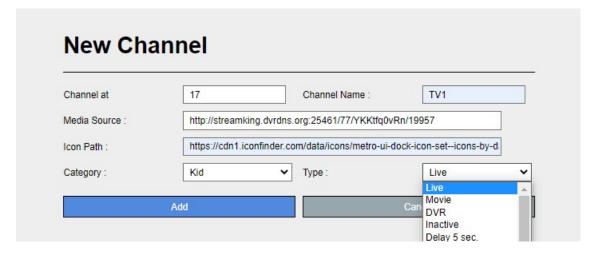
2.2 Channel Management

2.2.1 Add new channel

1.

♠ DashBoa	ard	Q Users ▼	Channels ▼	Movies ▼	Series
			Add Channel		
Channel			Manage Channels	s	
		Channel Nar	Manage EPG	Vledia Source	
	□ 1	RTS 1	dir://medi	a/videos/Movie/	
	□ 2	TV3	http://bitc	dn-kronehit.bitmovin.co	m/v2/r
	□ 3	RTS 2	dir://medi	a/videos/Movie/	

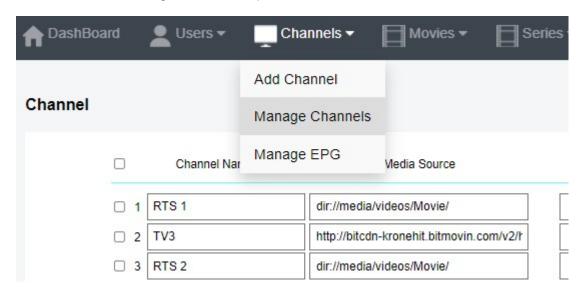
2.



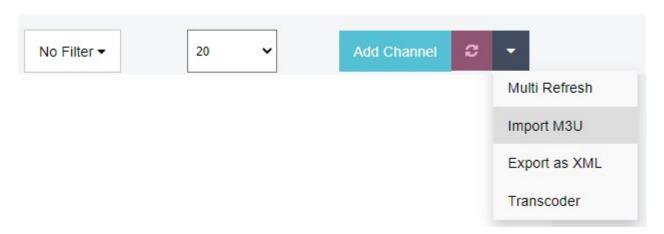


2.2.2 Import channels by m3u link

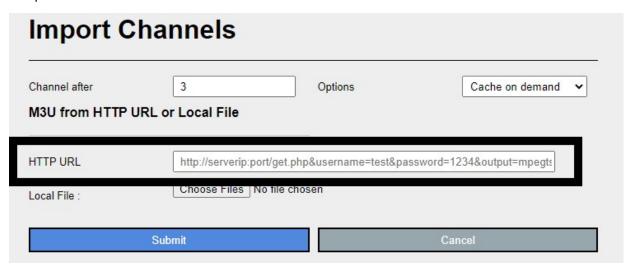
1. Click Channels: Manage Channels: Import M3U



2. Click Import M3U



3. Input HTTP M3U Link and Click Submit button





4. Then restart ezserver by ./restart.sh cmd in ssh console or click panel power off button, then wait for 1~2 min. to login panel again.



- 5. if any issue after import by the above way., you can refer the below steps
 - Use Chrome to download your m3u link and rename it to new.m3u
 - Click Choose Files to select new.m3u and click Submit button.

Channel after	3	Options	Cache on demand
M3U from HTTP U	IRL or Local File		
	[1.400.40
HTTP URL	http://serverip:port	l/get.php&username=test&pa	ssword=1234&output=mpegts

- 6. if any issue after import by the above way., you can refer the below steps
 - Use Chrome to download your m3u link and rename it to new.m3u
 - Upload new.m3u into server /home/ezserver_blockchain folder
 - Open /home/ezserver_blockchain/channel_definition.xml
 - Remove all lines except the 1st line and save it.
 - Restart ezserver by ./restart.sh in ssh console again
 - Import it again by new URL: http://ezserverlP:panel_port/new.m3u
 - Login panel to check it again.

2.2.3 All SD, HD, FHD channels setting

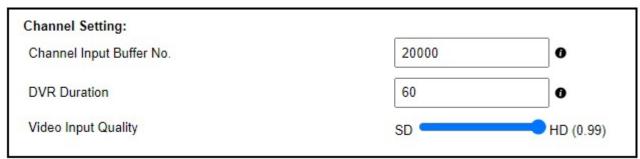
Click Panel Setting.

1. SD channel (~2Mbps)



2. HD / FHD channel (above 4Mbps)

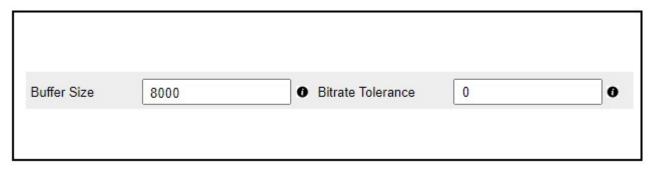




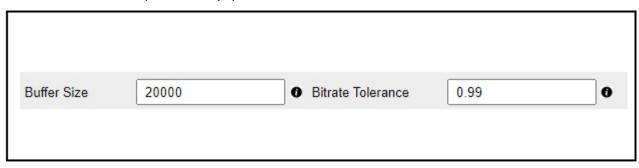
2.2.4 Single SD, HD, FHD channel setting

Click Panel Channel Management: Edit button of the channel.

1. SD channel (~2Mbps)



2. HD / FHD channel (above 4Mbps)

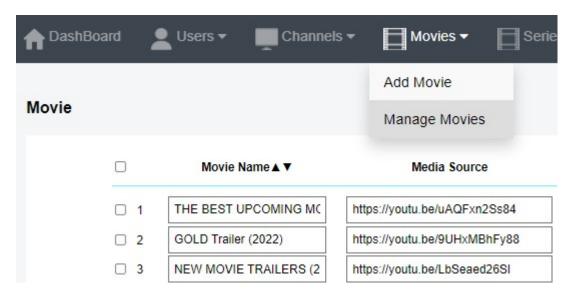


2.2.5 Daily Refresh Channel

- Add channel_refreh=1 in ezserver_blockchain/ezserver_config.txt.
- Run ./restart.sh to restart ezserver
- Ezserver will refresh all channels at 00:00 AM per day.

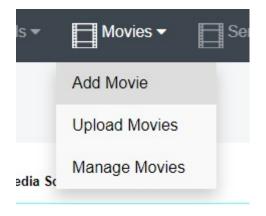


2.3 Movie Management

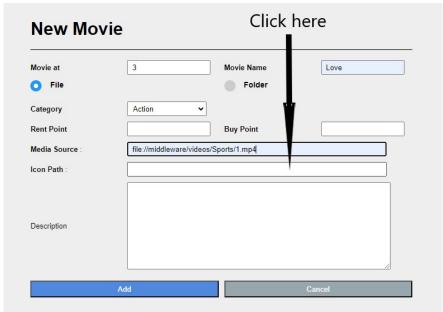


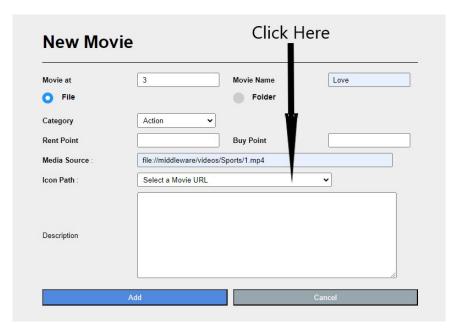
2.3.1. Add TMDB Movie

This option works only for HTTPS Admin Panel.



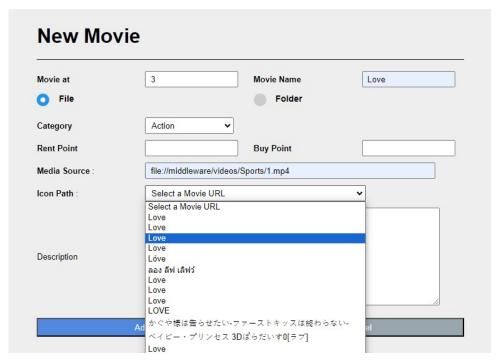


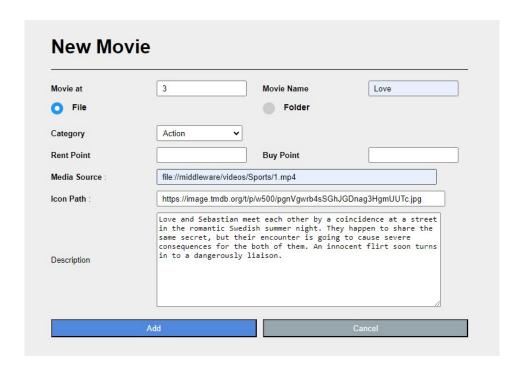




Select one option from the list:



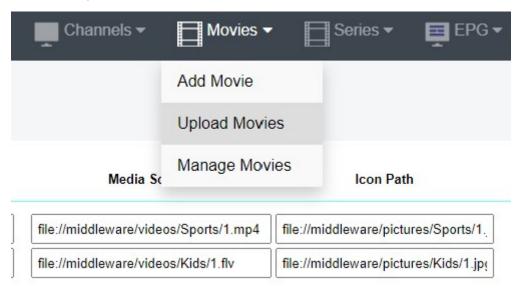




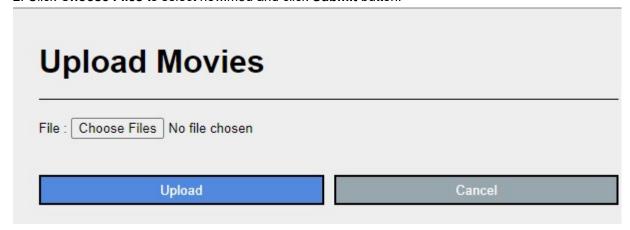


2.3.2. Upload Local movies

1. Click Movies: Upload Movies

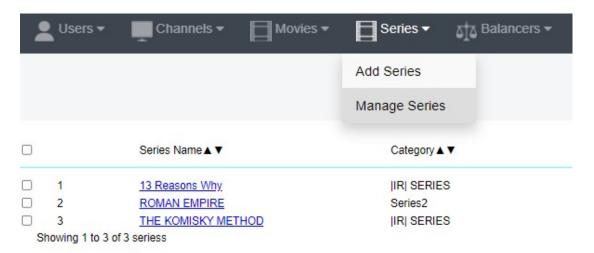


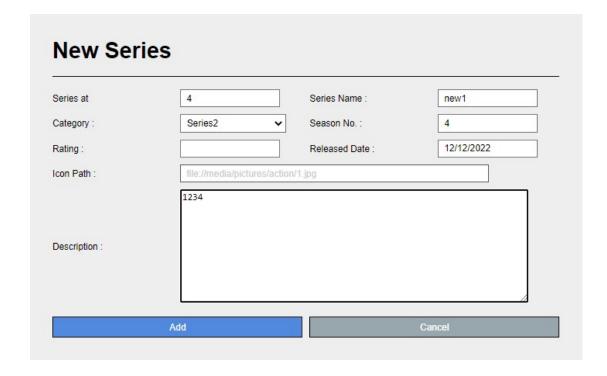
2. Click Choose Files to select new.m3u and click Submit button.





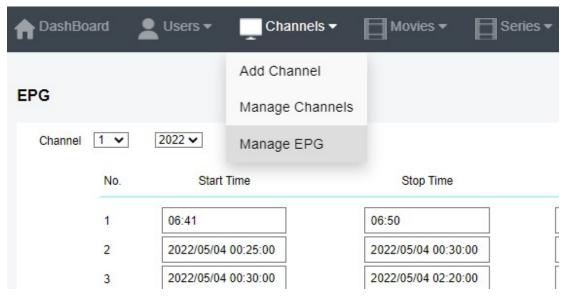
2.4 Series Management







2.5 EPG Management



There are 3 ways to add EPG to Ezserver, one is from XMLTV URL, the other is from UDP Stream, another is manual insertion.

XMLTV URL





UDP Stream

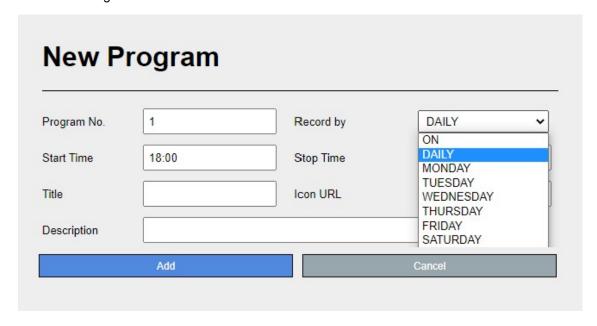
Add channels by multicast URL as below and enable MPEG EPG Extraction option

		Channel Name ▲ ▼	Media Source	
	1	Euronews	udp://239.0.0.4:1234	
	2	Eurosport	udp://239.0.0.5:1234	
	3	HSE24 Extra	udp://239.0.0.6:1234	
	4	Kabel 1	udp://239.0.0.8:1234	
Ch	annel	Streaming Prebuffer No.	2000	0
Ch	annel	Reconnection Interval	6	0
MF	EG E	PG Extraction	•	
Pa	ninatio	on Limit Number	100	
		System Log Lines	1000	
			4.675	



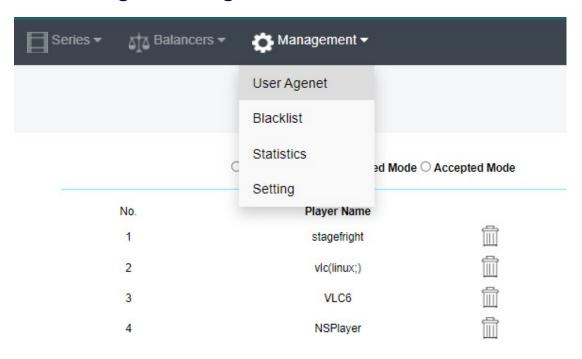
Manual insertion

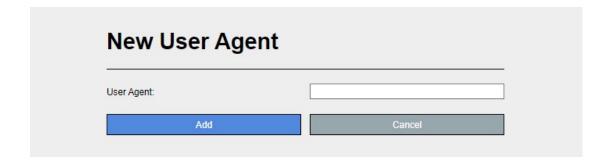
Select DAILY, MONDAY, or others with Start time, then Ezserver will record video by the option into local storage and insert the video into Movie menu.





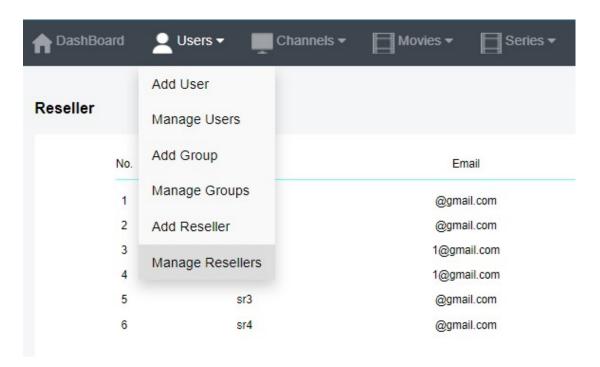
2.6 User Agent Management

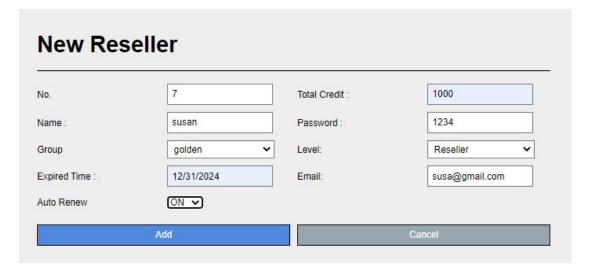






2.7 Reseller Management





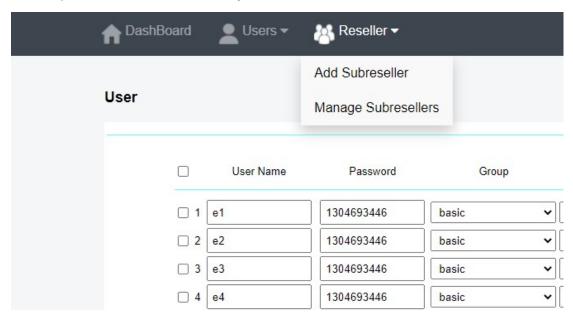
Auto Renew: When a user associated with a reseller account expires, the ezserver system automatically adjusts the reseller's credit by deducting an amount equivalent to the expired user's subscription cost.



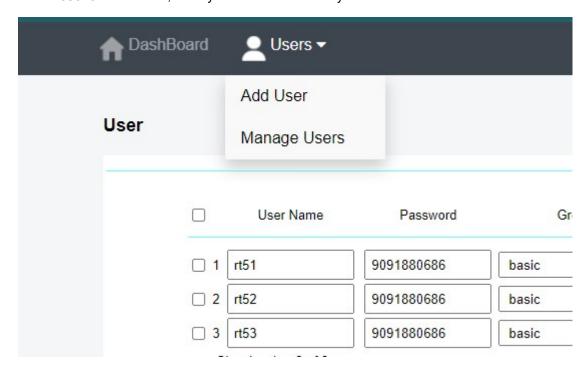
3 Reseller Panel

Input URL: http://domain:port/reseller/index.htm in Chrome

• Super reseller can create, modify and delete Resellers and users



Reseller can create, modify and delete users only.





4 Middleware for Apps

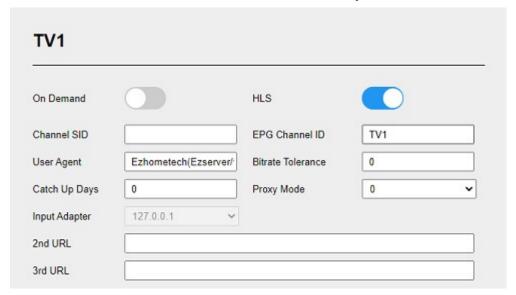
Ezserver middleware platform grants users access to live TV channels, on-demand video content, and additional features like electronic program guides. Our platform is designed to seamlessly support various protocols and technologies, including HLS, HTTP, and HTTPS, ensuring smooth content streaming across a wide array of devices and platforms. Currently compatible with Google Chrome, Microsoft Edge, Apple Safari, FireFox, Android STB / Smarter TV and LG Smarter TV, it offers a flexible and user-friendly experience for diverse viewing preferences.

Main Menu



For Android STB, Smarter TV, and LG Smarter TV, users are required to install the Ezserver Player on these devices to access the full range of features and enjoy seamless IPTV streaming.

Note: For Internet Browser use: Need to enable Channel HLS option





5 DBTool

Migrate Xtream UI / XUI-One Users and Resllers to Ezserver

- cd /home/ezserver_blockchain
- ./dbtool or ./dbtool dbname
- ex. 1 (default file: xtream_iptvpro_xui)
- ./dbtool
- ex. 2 your dbname
- ./dbtool xtream_iptvpro_xui.sql
- ./restart.sh

*** Restart ezserver after dbtool execution ***



6 VideoCloud Node Setting

The blockchain network consists of 4 pivotal nodes, each playing a crucial role in ensuring a robust and secure ecosystem for content delivery. These nodes are **User Server**, **Content Server**, **Proxy Server** and **Reverse Proxy Server**

- **User node**: management user information.
- Content node: It can be for channel or movie streaming.
- Reverse Proxy node: hide the User.
- Proxy node: acts VPN server to hide the User and Content Servers.
- Proxy node (www.your_domain_name.com)
 - ♦ Add proxy_server=1 in ezserver_blockchain/ezserver_config.txt
 - ♦ Delete all users except root and channels, movies and series.
 - ♦ Enable Main / Slave Node option
 - ♦ Define Control port



- Reverse Proxy node (www.your_domain_name.com)
 - ♦ Delete all users except root and channels, movies and series.
 - ♦ Enable Main / Slave Node option
 - ♦ Define Control port





User Node

Acts Main node

- ♦ Delete channels, movies and series.
- ♦ Enable Main / Slave Node option
- ♦ Define Control port



Otherwise (Slave Node)

- ♦ Delete channels, movies and series.
- ♦ Disable Main / Slave Node option
- ♦ Input User Node Domain Name
- ♦ Input User Node Control port



Content Node

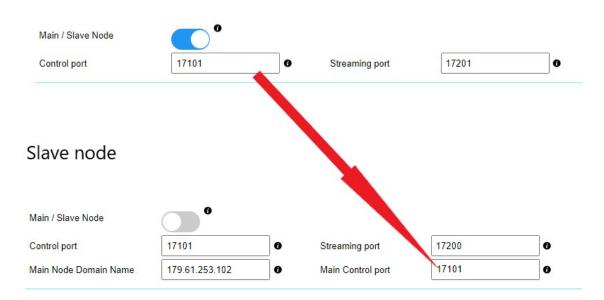
- ♦ Delete all users except root
- ♦ Disable Main / Slave Node option
- ♦ Input User Node Domain Name
- ♦ Input User Node Control port



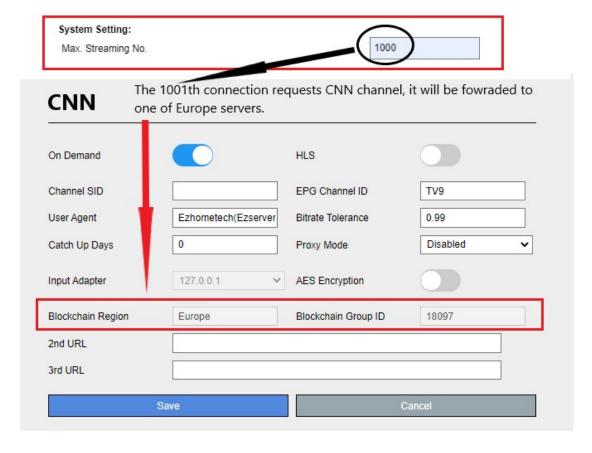


Example:

Main node



When a server has full connections, Ezserver invokes Blockchain function to let other servers serve the new connection and shows protocol BVP instead of HTTP in current server and BCP in another server.

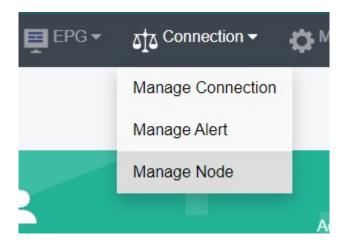




7 Work Folder

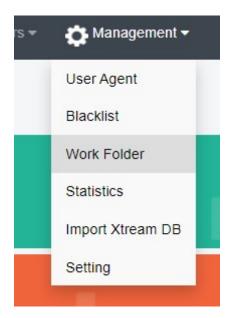
Assign movie and series folder path of Content Nodes in Main server Panel.

Check Content Nodes in main server first



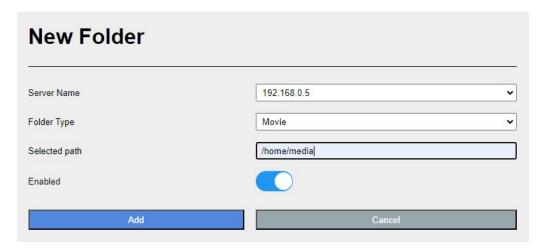
Nodes				
	No.	Node	Region	Group ID
	1	192.168.0.9	Asia	18000
	2	192.168.0.5	Furope	18000

Create Work Folder of Content Nodes in main server





Create Movie Folder



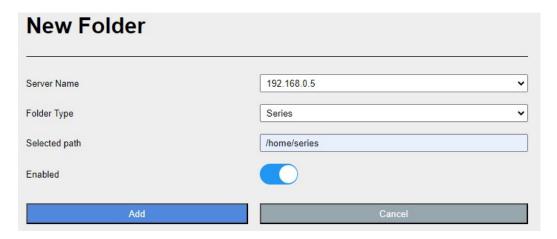
- Add new folder (/home/media) in Content Node
- Upload mp4 files into /home/media as below syntax

Folder name for movie name to get its TMDB profile Hider In My House (2023) [imdb-tt16531670] Upload one film into the folder Hider.In.My.House.2023.1080p.WEB-DL.EAC3.2.0.h264-Kitsune.mkv Welcome to Valentine (2023) [imdb-tt25391092] Welcome.to.Valentine.2023.PCOK.1080p.WEB-DL.EAC3.5.1.x264-NTb.mkv Monster Hunter (2020) Luckless in Love (2023) [imdb-tt21212308] Hider In My House (2022) [imdb-tt16531670]

System automatically refreshes hourly movie work folder



Create Series Folder



- Add new folder (/home/series) in Content Node
- Upload mp4 files into /home/series as below syntax

Filename syntax: Series name - episodes name - xxx.mp4

- used US S01E01 WEBDL-720p.mkv
 used US S01E02 WEBDL-720p.mp4
 bhagya-lakshmi S01E05 WEBDL-720p.mp4
 bhagya-lakshmi S01E04 WEBDL-720p.mp4
 bhagya-lakshmi S01E03 WEBDL-720p.mp4
 bhagya-lakshmi S01E02 WEBDL-720p.mp4
 bhagya-lakshmi S01E01 WEBDL-720p.mp4
- ezserver automatically refreshes hourly series work folder



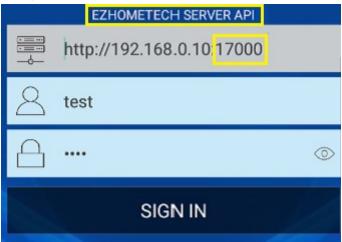
8 Supported Popular Players

XCIPTV

Select Ezhometech API



• uses Ezserver API port (17000)



IPTV Smater

uses ezserver streaming port (8000) instead of API port (17000)

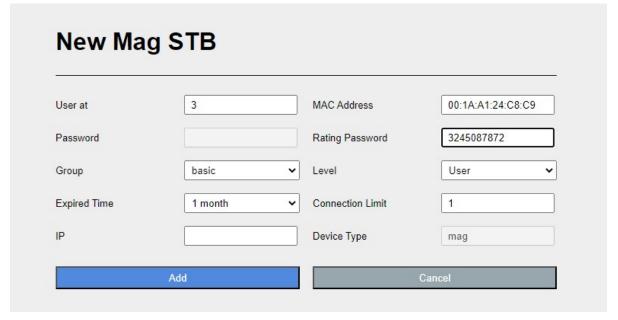




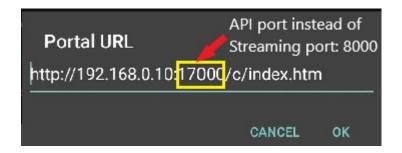
Mag STB

Use Ezserver API port (17000)

• Add Mag MAC ID into Ezserver IPTV Panel



Portal URL is http://domain:17000/c/index.htm





9 M3U / M3U8 URL for Players

9.1 M3U List API

- Go to User menu
- Select m3u(getlink API)

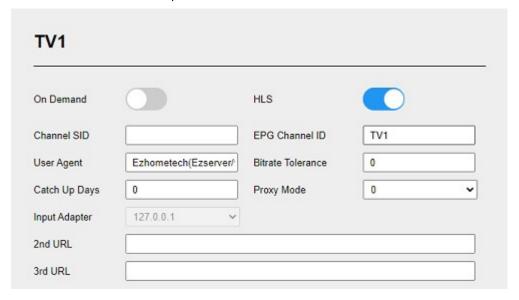


Copy the URL to players



9.2 M3U8 List API

Enable Channel HLS option



- Go to User menu
- Select m3u8(getlink API)



Copy the URL to players