

Open Source Software

OSS - Open Source Software

- [Home Media System](#)
 - [Jellyfin](#)
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Home Media System

Kodi, Jellyfin, Plex and Emby ??????????

Jellyfin

Introduction

[Jellyfin](#) is the volunteer-built media solution that puts you in control of your media. Stream to any device from your own server, with no strings attached. Your media, your server, your way.

- [Setting up Jellyfin Media Server on Raspberry Pi \(itsfoss.com\)](#)

Installation

With Docker

```
# Pull the image
docker pull jellyfin/jellyfin

# Create the directories
mkdir {config,cache,video}

# Create the account
addgroup --system jellyfin
adduser --system --ingroup jellyfin jellyfin

# Set the permission
chown jellyfin:jellyfin config cache

# Run the container
docker run -d \
  --name jellyfin \
  --user $(id -u jellyfin):$(id -g jellyfin) \
  --net=host \
  --volume $(pwd)/config:/config \
  --volume $(pwd)/cache:/cache \
  --mount type=bind,source=$(pwd)/video,target=/video \
  --restart=unless-stopped \
```

Quick Start

`http://SERVER_IP:8096`

Plugins

- <https://github.com/JavScraper/Emby.Plugins.JavScraper>

??????????

- <https://jellyfin.org/docs/general/server/plugins/index.html>
- danieladov's Repo?
`https://raw.githubusercontent.com/danieladov/JellyfinPluginManifest/master/manifest.json`
- dkanada's Repo? `https://raw.githubusercontent.com/dkanada/jellyfin-plugin-intros/master/manifest.json`

??? > ??? > ??? > ??

??????

??? > ??? > ?? > [????????] > Install

????

- <https://github.com/iptv-org/iptv>
- <https://www.youtube.com/watch?v=htCDPwMQwcE>

Storj DCS Cloud Storage

- [Setting up Storj with Plex Using Rclone](#)

rclone mount

```
rclone mount storjdcj-jellyfin:media /root/jellyfin/video --vfs-cache-mode full --dir-cache-time 1h --no-checksum --no-modtime --rc
```

```
rclone mount storjdcj-jellyfin:media /root/jellyfin/video \  
--vfs-cache-mode full \  
--allow-other \  
--dir-cache-time 1h \  

```

```
--uid=$(id -u jellyfin) \  
--gid=$(id -g jellyfin) \  
--no-checksum --no-modtime --rc
```

Refreshing the Local Sync Location

This recursively refreshes the root directory of the Rclone mount to pick up the newly uploaded files in Storj.

```
rclone rc vfs/refresh -v --fast-list recursive=true
```

- ?????????????????????????? CTRL+C?
- ??????? owner ??? root????????? docker ?????????????? --user \$(id -u jellyfin):\$(id -g jellyfin) \ ?

FAQ

“ ??????????????”

Solution: ????????????

```
# On the docker host  
apt install fonts-noto-cjk  
  
# Adjust the launch command  
docker run -d \  
...  
--volume /usr/share/fonts:/usr/share/fonts \  
--volume /usr/share/fontconfig:/usr/share/fontconfig \  
...  
jellyfin/jellyfin
```

?? Browser cache???????????????

?????????????? config/metadata/library/ ??????????????????????

“ ASS ????????????”

Solution:

1. ???????(????) `NotoSansCJKtc-Regular.woff2`? `NotoSerifCJKtc-Regular.woff2` ??????
<https://github.com/CodePlayer/webfont-noto/releases>
2. ????? docker ????? font/ ??????????????????
3. ?? docker ?????????????? `--volume $(pwd)/fonts:/fonts \` ????? container?
4. ?? Jellyfin ????? > ??? > ?? > Fallback font folder path: `/fonts` ?Enable fallback fonts:
Checked
5. Done

“ rclone ?? StorjDCS ?????

Fatal error: failed to mount FUSE fs: fusermount: exec: "fusermount":
executable file not found in \$PATH

Solution?

```
sudo apt install fuse
```

OSS & Freewares

OSS List

- [Awesome-Selfhosted](#)
- [LinuxLinks - The Linux Portal Site](#)
- [OpenAlternative](#)

Good Articles to OSS

- [???????????????????](#)

????????? (Alternative to Google Analytics)

- [Plausible Analytics](#)
 - [Complete Guide to Self-hosting Plausible \[Privacy Friendly Google Analytics Alternative\]](#)
- [Rybbbit Analytics](#)
 - GitHub: <https://github.com/rybbbit-io/rybbbit>
 - Doc: [Introduction - Rybbbit](#)

Video Conference

[Jitsi](#)

- [How to Self Host Jitsi Meet With Docker](#)

Data Backup

- Restic - Commands and tools such as cp, rsync, and unison are excellent for moving data from one location to the other and even for synchronizing data. However, they are not ideal for a differential or incremental backup strategy. They are also not efficient in terms of resource usage. A good backup solution not only performs a full backup, but also examines the objects to see what has changed. It accounts for these changes and saves them accordingly with emphasis on security and efficiency. When it comes to restoration, a viable backup solution should allow for the bulk and granular restoration of files, directories, and objects based on a point-in-time. **Restic** checks all of the boxes when it comes to a solid backup solution.

- [Restic Backups, A Flexible & Powerful Backup Solution](#)
- [Kopia](#) - ??????????, Amazon S3, Azure Blob Storage, Google Drive, Cloud storages supported by Rclone?? GUI ? CLI ???
 - Doc: [What is Kopia? | Kopia](#)
 - GitHub: <https://github.com/kopia/kopia/>
 - [I self-host Kopia to back up my essential files - here's how you can, too](#)

Performance Analytics

Guider - Python-based Tools

- Official: <https://iipeace.github.io/docs/guider.html>
- [How to Install Guider Linux Performance Analyzer on Ubuntu 20.04](#)

Presentation

Make a slide with Markdown

- <https://revealjs.com/> Web Presentation
- <https://github.com/jdan/cleaver>
- <https://rabbit-shocker.org/>
- <https://hackmd.io/> Online-Slide
- [moffee: Make Markdown Ready to Present](#)

[Prezi](#) - ??????

- YT: [?? | Prezi ??????? - YouTube](#)

Server Performance Monitor

- [Collectd](#)
 - [Configure Collectd as a Central Monitoring Server for Clients](#)
 - [How to Install and Configure 'Collectd' and 'Collectd-Web' to Monitor Server Resources in Linux](#)
- [Checkmk](#)
 - [Using Checkmk for Monitoring Your Linux Server Infrastructure](#)
- [Healthchecks](#) - Healthchecks is a cron job monitoring service. It listens for HTTP requests and email messages ("pings") from your cron jobs and scheduled tasks ("checks"). When a ping does not arrive on time, Healthchecks sends out alerts. ???

Cron job?? script ? HTTP API
??

- [Netdata](#) - Monitor your servers, containers, and applications, in high-resolution and in real-time.
 - [How to Monitor Performance Of CentOS 8/7 Server Using Netdata \(tecmint.com\)](#)
- [Beszel](#) ?????????????????????? Docker ??????????????????????
 - [This free and open-source lightweight server monitor changed how I keep an eye on my home lab](#)

Server UpTime Monitor

- [Uptime Kuma](#)
 - [How I use Uptime Kuma to monitor my self-hosted services \(and get notifications if they go down\)](#)
- [NEMS Linux](#): NEMS is the Nagios Enterprise Monitoring Server for Single Board Computers
 - [Video] [NEMS Linux 1.4.1 - The FREE Nagios Enterprise Monitoring Server](#)
- [Gatus](#): Gatus is a developer-oriented health dashboard that gives you the ability to monitor your services using HTTP, ICMP, TCP, and even DNS queries as well as evaluate the result of said queries by using a list of conditions on values like the status code, the response time, the certificate expiration, the body and many others. The icing on top is that each of these health checks can be paired with alerting via Slack, Teams, PagerDuty, Discord, Twilio and many more.
- [BlueWave Uptime](#)
- [OneUptime](#): OneUptime helps you handle incidents, set up on-call rotations, run tests, secure your services, analyze logs, track performance, and debug errors.
 - GitHub: <https://github.com/OneUptime/oneuptime>
- [CoolMonitor](#)
- [CheckCle](#): Open-source monitoring platform offering real-time insights into server and service health, incident management, and operational transparency.
 - GitHub: <https://github.com/operacle/checkcle>

Remote Control

- [RPort](#): Self-hosted open source remote management solution for Windows & Linux. Intuitive, easy to use inventory management, remote access, script execution, VPN replacement, and much more.
 - [Video] [RPort - an open source, self hosted Remote Machine Management System running on Linux!](#)
- [Rustdesk](#) - Alternative to Teamviewer, Anydesk

- [Video] [Rustdesk - an Open Source, Self Hosted alternative to TeamViewer, AnyDesk, GoToAssist, and the like.](#)

Console & Terminal

- [tmate: Instantly Share Terminal Session With Other Linux Users](#)
- Web Console
 - GateOne
 - <http://liftoffsoftware.com/>
 - <https://github.com/liftoff/GateOne>
 - <https://liftoff.github.io/GateOne/index.html>
 - [Bastillion](#) - Java-Based
- Terminal Output
 - [asciinema](#) - Terminal Recording
 - [termbin](#): A Secure Way to Share Terminal Output Online

Mail Server

- [grommunio](#)
- [Mail-in-a-Box](#)
 - [Video] [Episode 5 - Building a Business on Open Source - Setting up Email, Calendars, Contacts, & Cloud Sync](#)

???-?????? Translation

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- [Weblate](#)
- [POEditor](#)
- [Crowdin](#)

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- [????????????????](#)
- [?????](#)
- [???? - ??????moda — ?????? Ministry of Digital Affairs](#)

Software Router

- [OPNSense](#)
 - [Video] [OPNSense - a powerful, open source, network firewall and router](#)
- [pfSense](#)
- [OpenWrt](#)
- [RouterOS](#)
- [IPFire](#)

Linux Firewall

- [FireHOL](#)
 - [FireHOL IP Lists | IP Blacklists | IP Blocklists | IP Reputation](#)

Kiosk

- [Porteus Kiosk](#)
- Raspberry Pi Kiosk Mode
 - [Raspberry Pi Wayland Kiosk for Home Lab Dashboard - Virtualization Howto](#)

Web Benchmark

- [Ddosify - High-performance load testing tool](#)
- [Apache JMeter](#) is open source software, a 100% pure Java application designed to load test functional behavior and measure performance.

Calendar

- [Baikal](#)
 - [How to Create a Calendar Server With Baikal](#)

Active Directory

- [Zentyal](#) - Join Windows® clients to the domain and manage them transparently. No disruption to your users, no user or device CALs.
 - [Video] [An Open Source Domain Controller and Active Directory system with Zentyal!](#)

Cloud Storage

- [MinIO](#) offers high-performance, S3 compatible object storage.
 - [How to Install MinIO Storage on Rocky Linux](#)

- [SeaweedFS](#) is a fast distributed storage system for blobs, objects, files, and data lake, for billions of files.
- [Nimbus](#) - An open source alternative to Google Drive, One Drive, iCloud, etc.
- [PersonalDrive](#) - Self Hosted Google drive alternative

Bootable USB Drive with ISO files

- [Ventoy](#)
- [Easy2Boot](#)

Game OS

- [SteamOS Holo](#)
 - [Video] [The Worlds Smallest Steam Machine! A Powerful Ultra Micro Gaming PC](#)

??????

- [Shinobi](#)
 - [Video] [Shinobi Update! This 2023 look at Shinobi CCTV System Helps show the power of open source!](#)
- [Viseron](#) - AI ????
 - [Video] [Viseron - an open source, self hosted video surveillance solution with Motion and Object detection!](#)
- [Zoneminder](#)
 - [Video] [Zoneminder - an Open Source, Self Hosted surveillance system powerful enough for the Enterprise!](#)

NAS

- [TrueNAS CORE](#)
 - [TrueNAS User Guide](#)
- [OpenMediaVault](#)
 - Default Login: admin / openmediavault
 - [Documentation](#)

Forum

- [Flarum](#)

- [Flarum: An Open-Source Community Platform Like Discourse](#)

Home Lab/Cloud Server

- [5 of the most beginner-friendly home server operating systems](#)
- [CasaOS](#) - Your Personal Cloud OS
 - [Video] [Setting up a CHEAP and EASY Homelab Linux Server](#)
- [Umbrel](#) - Your cloud. In your home.
- [1Panel](#) - Web-based linux server management control panel
 - GitHub: <https://github.com/1Panel-dev/1Panel>
 - Doc: [1Panel ??](#)
- [Home Assistant](#) - Open source home automation that puts local control and privacy first. Powered by a worldwide community of tinkerers and DIY enthusiasts.
 - [Home Assistant is the best example of what free and open-source software should be](#)
- [Homebridge](#) allows you to integrate with smart home devices that do not natively support HomeKit.
 - [I tried HomeBridge to replace Home Assistant and here's what I learned](#)

OAuth2/SSO

- [Authelia](#) - Protect your applications with Single Sign-On and 2 Factor.
 - [Video] [2 Factor Auth and Single Sign On with Authelia](#)
 - [Video] [Authelia - Free, Open Source, Self Hosted authorization and authentication for your web applications](#)
- [Authentik](#) - Identity made easy. authentik makes single-sign on (SSO), user enrollment, and access control simple.
 - [Video] [Replace Authelia With Authentik Web Proxies And OAuth2](#)
- [Zitadel](#) - Secure authentication management for your application.
 - [Video] [Zitadel, Single Sign On, and OAuth. It's Impressive!](#)
- [Keycloak](#) - Open Source Identity and Access Management
 - [Video] [Keycloak Is AWESOME! Single Sign On Made Easy!](#)
- [JumpServer](#) is an open-source Privileged Access Management (PAM) tool that provides DevOps and IT teams with on-demand and secure access to SSH, RDP, Kubernetes, Database and RemoteApp endpoints through a web browser.
 - GitHub: <https://github.com/jumpserver/jumpserver>
 - YT: [JumpServer v4.0 Quickstart Guide - YouTube](#)

Audio

- [Best Free and Open Source Software - Audio - LinuxLinks](#)

File Transfer

- [ProjectSend](#) - ??????
 - [How to Install ProjectSend with Apache and Let's Encrypt SSL on Ubuntu 20.04](#)
- [Jirafeau](#)
- [Croc](#) - ??????????PAKE ?????????????????? Proxy?

Database

- [Greenplum](#) - ?????? PostgreSQL ??????????MPP?????
 - [Greenplum Database ???? ?????????????????? - ?????? \(omniwaresoft.com.tw\)](#)
- [ChartDB](#) - Open-source database diagrams editor
 - GitHub: <https://github.com/chartdb/chartdb>
- [drawDB](#) - Free and open source, simple, and intuitive database design editor, data-modeler, and SQL generator
 - GitHub: <https://github.com/drawdb-io/drawdb>

SQL Tools

- [Beekeeper Studio](#) is a cross-platform SQL editor and database manager available for Linux, Mac, and Windows.

Business Management

- [Odoo](#)
- [Zulip](#) - Open-source team chat that helps teams stay productive and focused.
Alternative to Slack.

Desktop Tools

- [Keyviz](#) - ??????????????????????????????

Push notification

- [ntfy](#) - Send push notifications to your phone or desktop using PUT/POST
 - GitHub: <https://github.com/binwiederhier/ntfy>

- Doc: <https://docs.ntfy.sh/>
- [Video] [Open Source Push Notifications! Get notified of any event you can imagine. Triggers abound!](#)
- [Bark](#) - An iOS App which allows you to push customized notifications to your iPhone.
 - GitHub: <https://github.com/Finb/bark-server>

IP Scanner

- [WatchYourLAN](#)
- [Arpwatch](#)

Android running Linux

- Termux: [? Android ????? Termux ???? Linux ??](#)
- UserLAnd: [UserLAnd ?????? Android ??? Ubuntu ?????](#)

IoT

- [Home-Assistant](#) - Open-source home automation platform

Note-Taking

- [Docs](#) - ?????????????? Notions????????????????????
- [Outline](#) - A fast, collaborative, knowledge base for your team built using React and Node.js.
 - [5 reasons Outline is better than Notion for most people](#)
- [CodiMD](#) - ?????? [HackMD](#) ??????????????
- [Memos](#) - Open Source, Self-hosted, Your Notes, Your Way

KM Management

- [Wiki-Go](#) is a modern, feature-rich, databaseless flat-file wiki platform built with Go.

Gallery/Photos

- [Immich](#) - ?????/??????
 - [Immich????????????????Google?????????? - Ivon???? \(ivonblog.com\)](#)
 - [How I made my own photo hosting platform with Immich](#)
- [Lychee](#)

- [Backup your photos for free using this self-hosted image gallery](#)

????(self-hosted)??

- [???? - LibreSpeed](#)
- [UVdesk: A Free and Open-Source Helpdesk Ticket System](#)
- [Rundeck](#) - ??????????
 - [Take Control of Your Cron Jobs With Rundeck](#)
 - [Rundeck????????](#)
- [Alnoda Workspace](#) - ??????????(????????)?? Web ???
- [Redmine](#) - ?????????
 - [How to Install Redmine Project Management Tool on Ubuntu 22.04](#)
- [Matrix](#) - An open network for secure, decentralized communication
- [PeerTube](#) - An alternative to Big Tech's video platforms
- [dataease](#) - ??????????Tableau ???
- [Trigger.dev](#) - Open source background jobs with no timeouts
- [Reactive-Resume](#) - A free and open-source resume builder that simplifies the process of creating, updating, and sharing your resume.
 - Doc: [Reactive Resume](#) | [Reactive Resume](#)
- [Puter](#) - The Internet OS! Free, Open-Source, and Self-Hostable

phpIPAM

Introduction

phpIPAM - Open source IP address management.

phpipam is an open-source web IP address management application (IPAM). Its goal is to provide light, modern and useful IP address management. It is php-based application with MySQL database backend, using jQuery libraries, ajax and HTML5/CSS3 features.

URLs:

- Home: <https://phpipam.net/>
- API: https://phpipam.net/api/api_documentation/
- Github: <https://github.com/phpipam/>

Installation

- <https://phpipam.net/documents/installation/>

Requirements

1. Apache2 webserver with php support or Nginx with php-fpm
2. Mysql server (5.1+)
3. PHP:
 - version 5.3 supported to phpipam version 1.3.1
 - version 5.4
 - version 7.2 and higher supported from phpipam release 1.3.2
4. PHP modules:
 - pdo, pdo_mysql : Adds support for mysql connections
 - session : Adds persistent session support
 - sockets : Adds sockets support
 - openssl : Adds openSSL support
 - gmp : Adds support for dev-libs/gmp (GNU MP library) -> to calculate IPv6 networks
 - ldap : Adds LDAP support (Lightweight Directory Access Protocol – for AD also)
 - crypt : Add support for password encryption
 - SimpleXML: Support for SimpleXML (optional, for RIPE queries and if required for API)
 - json: Enable JSON support
 - gettext: Enables translation

- filter : Adds filtering support
 - pcntl : Add support for process creation functions (optional, required for scanning)
 - cli : Enable CLI (optional, required for scanning and status checks)
 - mbstring : Enable mbstring support
5. php PEAR support

You can check which php modules are enabled by issuing `php -m` in command line.

API Develop

Enable API and Create new API Key (code)

By default, the API is Disabled, go to Enable it first.

IPAM Web > Administration > Server management > phpIPAM settings > API: ON

IPAM Web > Administration > API > Create API Key

- App id: devappro (??? app ???????? APP ????? app_id)
- App code: <??????????>
- App permissions: Read (???????)
- App security: User token (????????? HTTPS??????? User token)
- Transaction locking: No
- Lock timeout: 0
- Nest custom fields: No
- Show links: No

“ NOTE:

?? App security ? User token??? API ?????????? HTTP?????????????
`config.php` ????

`$api_allow_unsafe = true;`

API Test with curl

API ????

1. ???????????? IPAM ???/? ?????? Token???????? 6 ???
2. ??? API ????? header ???????? Token????????????? *Unauthorized?*
3. ????? API Key ? ??? Token ?????????????????? API Client ?????? Token?
4. Token ?????????????????? API ???

- ?????? Token?
- ?????????? Token?(?: ? Token ??????)

??????? token: /api/{app_id}/user/

TIP: ?????????????????

```
#> curl -X POST --user admin:thisispassword http://10.10.2.207/api/devapro/user/ -i

HTTP/1.1 200 OK
Date: Wed, 15 Jun 2022 05:40:01 GMT
Server: Apache/2.4.6 (CentOS) PHP/5.4.16
X-Powered-By: PHP/5.4.16
Set-Cookie: phpipam=ttm3cg1ctpq1vqn2lv1rht3kl1; expires=Thu, 16-Jun-2022 05:40:01 GMT; path=/; HttpOnly
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-cache
Pragma: no-cache
Content-Length: 116
Content-Type: application/json; charset=utf-8

{"code":200,"success":true,"data":{"token":"7dMGzul08SsPMhDDOK-oZdBk","expires":"2022-06-15
19:40:01"},"time":0.009}
```

?? token ???? : /api/{app_id}/user/token_expires/

```
#> curl -X GET http://10.10.2.207/api/devapro/user/token_expires/ --header "token: 7dMGzul08SsPMhDDOK-
oZdBk"

{"code":200,"success":true,"data":{"expires":"2022-06-15 19:44:31"},"time":0.002}
```

?? token ??? : /api/{app_id}/user/

TIP: ?????? 6 ??????????????? 6 ??

```
curl -X PATCH http://10.10.2.207/api/devapro/user/ --header "token: 7dMGzul08SsPMhDDOK-oZdBk"

{"code":200,"success":true,"data":{"expires":"2022-06-15 21:11:37"},"time":0.004}
```

? IP ????? : /api/{app_id}/addresses/search/{ip-address}/

```
# IP is existed.

curl -X GET http://10.10.2.207/api/devapro/addresses/search/10.10.1.8 --header "token:
7dMGzul08SsPMhDDOK-oZdBk"
```

```
{ "code":200,"success":true,"data":[{"id":"271","subnetId":"22","ip":"10.10.1.8","is_gateway":null,"description":"FAB A-VM Server-VM05","hostname":"TPECIMVM05","mac":null,"owner":null,"tag":"2","deviceId":null,"location":"3","port":null,"note":null,"lastSeen":"2022-06-15 13:30:01","excludePing":null,"PTRignore":null,"PTR":"0","firewallAddressObject":null,"editDate":"2022-06-15 13:30:10","customer_id":null}], "time":0.017}

# IP not found

curl -X GET http://10.10.2.207/api/devapro/addresses/search/10.10.1.7 --header "token:7dMGzul08SsPMhDDOK-oZdBk"

{"code":200,"success":false,"message":"Address not found","time":0.007}
```

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- Perl5 Interface: <https://github.com/natxo/phpipam-API>
- [11 Best IP Address Management Tools for Linux Network](#)

NextBox Community

NetBox Community ????? IPAM ?????????????????????????????

- GitHub: <https://github.com/netbox-community/netbox>
- Wiki: <https://github.com/netbox-community/netbox/wiki/Community-Contributions>
- Doc: <https://deepwiki.com/netbox-community/netbox/1-netbox-overview>
- Doc2: <https://netboxlabs.com/docs/netbox/installation/>