

# **Jellyfin Administrator Guide**

GNU/Linux Server Administration (CST8305)

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## Introduction

This guide provides comprehensive instructions on setting up, managing, and maintaining a Jellyfin Media Server via the terminal on a Red Hat Enterprise Linux 9.2 virtual machine. It includes detailed steps for installation, configuration, and client setup, ensuring a smooth user experience for both administrators and end-users.

## Jellyfin Service Explanation & Implementation

**Jellyfin** is an open-source media server that allows you to manage and stream your media. The implementation involves setting up Jellyfin on a RHEL 9.2 virtual machine, ensuring it can handle media libraries and stream to multiple clients.

### Implementation Steps:

- i. **Install EPEL Repository via RHEL terminal:**  
`sudo dnf install`  
`https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm`
- ii. **Install Jellyfin via RHEL terminal:**  
`sudo dnf install`  
`https://repo.jellyfin.org/archive/server/centos/stable/10.6.4/jellyfin-server-10.6.4-1.el7.x86\_64.rpm`
- iii. **Start and Enable Jellyfin Service via RHEL terminal:**  
`sudo systemctl start jellyfin`  
`sudo systemctl enable jellyfin`
- iv. **Access Jellyfin Web Interface:** Navigate to `http://<your-server-ip>:8096` in a web browser to configure Jellyfin.

## Description of FFmpeg Installation Method

**FFmpeg** is a multimedia framework used by Jellyfin for video and audio processing.

### Installation Steps:

1. **Install FFmpeg:**  
`sudo dnf install ffmpeg`
2. **Verify Installation:**  
`ffmpeg -version`

## Maintenance

### Regular Maintenance Tasks:

1. **Update System Packages:**  
`sudo dnf update -y`
2. **Monitor System Performance:** Use tools like `top`, `htop`, and `journalctl` to monitor system performance and Jellyfin logs.
3. **Backup Configuration and Media Data:** Regularly back up Jellyfin configuration files and media libraries.
4. **Restart Jellyfin Service:**  
`sudo systemctl restart jellyfin`

## Recap

This guide has outlined the installation, configuration, and maintenance of the Jellyfin Media Server on a RHEL 9.2 VM. Key steps include setting up the EPEL repository, installing Jellyfin and FFmpeg, and configuring the Jellyfin service.

## Final Thoughts

Running a media server like Jellyfin on a RHEL 9.2 VM requires careful setup and regular maintenance. Ensuring that all dependencies are installed and that the service is properly configured will result in a stable and efficient media streaming experience.

# Configuring Client Devices

## How to Use Jellyfin on Client Device #1 (Windows Host)

1. **Open Web Browser:**
  - Navigate to <http://<your-server-ip>:8096>.
2. **Log In:**
  - Enter your Jellyfin credentials to access the media library.
3. **Install Jellyfin Desktop Client (Optional):**
  - Download and install the Jellyfin Desktop Client from the Jellyfin downloads page.

## How to Use Jellyfin on Client Device #2 (Mobile Device)

1. **Android:**
  - Download the Jellyfin app from the Google Play Store.
  - Open the app and enter the server URL: <http://<your-server-ip>:8096>.
  - Log in using your Jellyfin credentials.
2. **iOS:**
  - Download the Jellyfin app from the Apple App Store.
  - Open the app and enter the server URL: <http://<your-server-ip>:8096>.
  - Log in using your Jellyfin credentials.

## Conclusion

This guide has provided detailed instructions for setting up and maintaining a Jellyfin Media Server on a RHEL 9.2 VM, including the installation of necessary dependencies, service configuration, and client setup. Following these steps ensures a reliable media streaming solution.

## Appendix

### Configuration Files:

- `/etc/jellyfin/network.xml`
- `var/lib/jellyfin/config`

### Useful Commands:

- `sudo systemctl status jellyfin`
- `sudo journalctl -u jellyfin`

These commands allow you to view the status and logs for your Jellyfin service respectively. This will be useful when troubleshooting problems with your service.

## References

[1] Jellyfin Documentation. [Online]. Available: <https://jellyfin.org/docs/>. [Accessed: 04-Aug-2024].

[2] FFmpeg Documentation. [Online]. Available: <https://ffmpeg.org/documentation.html>. [Accessed: 04-Aug-2024].