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].