QSAN Official Document

Plex Setup Guide

Application Note

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ANNOUNCEMENT

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FIGURES

Figure 1-1 Plex Media Server 1

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PREFACE

Technical Support

Do you have any questions or need help trouble-shooting a problem? Please contact QSAN Support, we will reply to you as soon as possible.

- Via the Web: https://www.qsan.com/technical_support
- Via Telephone: +886-2-77206355
- (Service hours: 09:30 - 18:00, Monday - Friday, UTC+8)
- Via Skype Chat, Skype ID: qsan.support
- (Service hours: 09:30 - 02:00, Monday - Friday, UTC+8, Summer time: 09:30 - 01:00)
- Via Email: support@qsan.com

Information, Tip, and Caution

This document uses the following symbols to draw attention to important safety and operational information.



INFORMATION

INFORMATION provides useful knowledge, definition, or terminology for reference.



TIP

TIP provides helpful suggestions for performing tasks more effectively.

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CAUTION

CAUTION indicates that failure to take a specified action could result in damage to the system.

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1. INTRODUCTION TO PLEX

Plex Media Server is a multimedia solution that organizes and streams video, music, and photo libraries to various clients. When deployed on the KSM platform, Plex benefits from KSM's integrated container runtime, unified storage architecture, and secure access framework.

1.1. Plex for Media Consolidation Server

Plex Media Server is a modern multimedia platform that centralizes, organizes, and streams personal media libraries across web, mobile, and smart-TV clients. It automatically analyzes and categorizes content, delivering a polished, metadata-rich playback experience. When deployed on the KSM platform, Plex benefits from unified storage, secure access, and seamless container-based operation.



Figure 1-1 Plex Media Server

Plex organizes and streams media content—videos, photos, and music—to remote or local clients. When deployed on the KSM platform:

- KSM Master Node handles orchestration.
- KSM Worker Node runs Plex runtime and mounts KSM Storage Space.

This design allows Plex to operate as a self-contained, secure, and scalable media platform using QSAN hardware.

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2. CONFIGURATION SETTINGS

Plex Media Server is a versatile and user-friendly streaming platform designed to organize, manage, and deliver multimedia content across a wide range of devices. When combined with the KSM platform's containerized runtime and unified storage architecture, Plex becomes a powerful media hosting solution that enables secure, centralized, and efficient content access.

In this chapter, we will take a closer look at how Plex operates as a microservice on the KSM platform. We will guide you through configuring KSM Storage Space, deploying the Plex container, and enabling HTTPS access for remote streaming. This section highlights key considerations and best practices to ensure smooth cataloging, stable playback, and optimal performance for your media-serving environment.

2.1. Environment and Topology

Demonstration Environment

- Master Node
  - Model: KS2204-8C
    CPU: 8 cores
    Memory: 16 GB
    Network: 2.5 Gb LAN
    Role: Control plane and service orchestration
- Worker Node
  - Model: KS1205-4A
    CPU: 4 cores
    Memory: 8 GB
    Network: 2.5 Gb LAN
    Role: Container runtime and media service execution

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2.2. Configuration Steps

Step 1. Pull Image

Pull the official Plex Media Server image from Docker Hub:

1. plexinc/pms-docker

Step 2. Create Service

In the KSM UI:

1. Create a new service
2. Select the Plex image
3. Assign the Worker node as the runtime target

Step 3. Assign Storage Space

1. Bind a KSM Storage Space as the media directory.
2. Plex will automatically scan and catalog content stored in this location.

Step 4. Configure Network & HTTPS

1. Assign the required TCP port
2. Enable HTTPS endpoint
3. Verify certificate validity
4. Configure gateway port forwarding for remote access

Step 5. Validate Service Readiness

Service becomes accessible within ~15 minutes.

1. Verification:
    - HTTPS endpoint
    - Media library detection
    - Client session connectivity

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3. CONCLUSION

Deploying Plex on the KSM platform combines the simplicity of UI-driven container deployment with the reliability of enterprise storage.

The Master–Worker architecture ensures a clean separation between orchestration and runtime, while KSM Storage Space provides a unified media repository that Plex can efficiently scan and organize.

KSM enhances the Plex experience with:

- Easier setup (no YAML / no scripts
- Secure access through HTTPS
- Transparent monitoring via built-in dashboards
- Scalable hardware and storage expansion

This makes KSM an ideal platform for both personal media centers and professional content-serving environments.

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4. APPENDIX

4.1. Apply To

- KSM firmware 1.0.0 and later

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