

Nexify: A Scalable and Secure Community Server for Real-Time Communication

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Abstract: *Nexify is a modern, scalable, and secure community server built for real-time communication, specifically designed to meet the demands of large online communities. As digital interactions continue to grow, many traditional messaging platforms struggle with scalability issues, latency, security risks, and content moderation challenges. Nexify tackles these problems by leveraging a microservices architecture, ensuring smooth scalability without affecting performance.*

The platform supports real-time messaging, voice, and video communication through WebRTC and Web Sockets, minimizing latency while maintaining high availability. To strengthen security, Nexify incorporates end-to-end encryption, OAuth-based authentication, and role-based access control, effectively preventing unauthorized access and protecting user data.

Additionally, Nexify is designed with a modular structure, making it highly customizable and compatible with third-party integrations, allowing communities to tailor the platform to their specific needs. This paper explores Nexify's architecture, core features, technology stack, and its advantages over conventional communication platforms. Looking ahead, planned enhancements include blockchain-based authentication for improved security, AI-driven predictive moderation, and expanded API support for seamless external integrations.

Keywords: Community server, real-time communication, scalability, security, moderation, WebRTC, WebSockets

