

DeskStream – Ultra High-Quality Live Screen Streaming Platform

➤ Introduction

DeskStream is a high-performance live screen streaming platform that works with an Electron Desktop App, WebRTC signaling, and Web & Mobile viewers to deliver ultra-smooth, real-time desktop streaming.

➤ System Architecture Overview

DeskStream is built on **four major components**:

◆ Electron Desktop App (Producer)

- Full screen or window-based screen capture
- Ultra-high-quality streaming (1080p / 60 FPS)
- Adjustable bitrate and FPS
- Low-latency live streaming

◆ Signaling + WebRTC

- Secure WebSocket-based signaling
- Peer-to-Peer WebRTC communication
- STUN server support
- Ultra-low real-time delay

◆ Web App / Live Viewer

- Browser-based live viewing
- No installation required
- Real-time desktop streaming
- Supports multiple viewers simultaneously

◆ Mobile App Viewer

- Android and iOS support (WebView / Native)

- Live desktop viewing on mobile devices
 - Optimized bandwidth usage
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➤ **Key Features**

- ✓ Ultra HD Screen Streaming
 - ✓ High Speed and Low Latency
 - ✓ Adjustable FPS and Bitrate
 - ✓ Secure WebRTC Connection
 - ✓ Works on Web and Mobile Platforms
 - ✓ Lightweight Electron Desktop App
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➤ **Use Cases**

- Remote Desktop Sharing
 - Online Training and Education
 - Live Coding Sessions
 - Remote Monitoring
 - Customer Support Demonstrations
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➤ **System Requirements**

Producer (Desktop):

- Windows 10 or later
- Minimum 4GB RAM
- Stable internet connection

Viewer:

- Any modern web browser
 - Mobile or desktop device
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Security

- End-to-end encrypted WebRTC media streams
 - No screen data stored on servers
 - Secure peer-to-peer streaming
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➤ **Conclusion**

DeskStream is a fast, secure, and scalable live desktop streaming solution, making it an ideal choice for modern businesses that require high-quality, real-time screen sharing.