

## 基于代理技术的 HLS 客户端设计与实现

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**摘 要:** 为了解决嵌入式终端上内置播放器播放 HTTP Live Streaming (HLS) 流媒体扩展性差的问题以及第三方软件播放器资源消耗高的问题, 设计并实现了一种基于代理技术的 HLS 客户端. 详细分析了该客户端的设计结构、工作流程以及实验平台. 实验结果表明: 提出的 HLS 客户端既能充分利用原系统平台硬件解码能力, 节省系统资源, 又能通过代理动态扩充 HLS 协议, 增强系统扩展性.

**关键词:** HLS; 代理; 客户端; 系统资源; 扩展性

## Design and Implementation of HLS Client

### Based on Agent Technique

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**Abstract:** For HTTP Live Streaming (HLS) on the embedded terminal, the built-in player has a poor scalability and the third-party software player has the problem of high consumption of system resources. To tackle these issues, a HLS client is designed and implemented based on agent technique. The design architecture, working process and experimentation environment of the client are presented in detail. The experimental results show that the proposed client can save system resources by making full use of the hardware decoding capabilities of the native system and enhance system scalability by extending HLS with the agent.

**Key words:** HLS; agent; client; system resources; scalability

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