



VSS ParallelStreamer™

Live Video Encoder for Silverlight, Flash and Mobile

Overview

The fastest growing segment of Internet Applications is Streaming Video. Already, digital video accounts for more than 60% of all data transferred over Internet. Popular consumer video sources like Netflix, Hulu, iTunes, YouTube and many more are expanding rapidly, will overtake Broadcast by 2020 according to The Diffusion Group (DTG). VSS ParallelStreamer™ solves the most important problem in this market, how to deliver content to variety of consumer devices with good quality and reliability over the internet.

AVC Adaptive Streaming Systems

The challenge in delivery of video to consumers over the internet is the constantly changing bandwidth of the clients connection. To address this shortcoming without changing the already accepted AVC video format, video serving has migrated to Adaptive Streaming architecture. Such systems continually monitor client player conditions and dynamically adjust video content being served. Each such system is proprietary and requires to have a matching set of server and player components. For example: MS Silverlight, Move Networks, Adobe Flash, Apple HTTP (iTunes) and others. Typically each such system consists of three major components, Encoding/Adaptation of video content; delivery of ready content to the appropriate player and the internet player itself. Here forth these will be called Adaptive Stream Encoder, Streaming Server and Streaming Player. VSS ParallelStreamer™ addresses the first component requirement, the Adaptive Stream Encoder.

VSS ParallelStreamer™ Functionality

- Video capture from MS DirectShow supported hardware capture devices
- Pre-processing such as de-interlacing, scaling, etc
- AVC Encoding of single source into up to 8 parallel streams per library
- All resulting streams are GOP aligned and set to appropriate resolution and bit rate for desired Adaptive Streaming application
- AAC Audio Encoding and muxing with all AVC Video streams
- Sending of each stream via RTP, UDP and RTSP protocols to Streaming Server

VSS ParallelStreamer™ Platform support

- Windows available now
- Linux available soon

VSS ParallelStreamer™ Compatibility with Streaming Servers

- Wowza Media Server. Client Players supported:
 - >> MS Silverlight, Adobe Flash, Apple Quicktime (Mac & iPhone), Android and customer RTSP players
- Microsoft IIS Streaming Server. Client Players supported:
 - >> Silverlight for Windows and Windows Mobile
- Apple Darwin Server (HTTP progressive download): Client Players supported:
 - >> QuickTime for PC/MAC, iPhone, iPod, iPad and other Apple devices
- Adobe Flash Media Server (available soon). Client Player supported:
 - >> Flash Player for all popular browsers

Real-Time Applications

VSS ParallelStreamer™ can encode and stream real time from a variety of video file formats and hardware capture devices. Typical use cases include:

- Live event capture by video cameras with SDI, HDMI, USB or 1394 interfaces
- Video conversion real-time using MS DirectShow compatible capture cards
- Available soon: real-time file transcoding

VOD (video-on-demand) Applications

VSS will soon offer an offline encoding application which will generate a set of GOP aligned files along with appropriate application manifest and indexing. These set of files will be fully compatible with above mentioned Streaming VOD Servers.

To inquire about VSS ParallelStreamer please contact us at sales@vsofts.com or +1 (650) 961 3098