Adaptive Video Acceleration™

Introduction

Giraffic Inc. specializes in improving performance, connectivity and the interoperability of the Network-Firmware-Hardware for consumer electronics devices, as well as accelerating the user experience of OTT video applications.

In just two years, Giraffic's Adaptive Video Acceleration (AVA) has been recognized and adopted by the consumer electronics industry, with over **50,000,000** AVA-enabled devices already shipped, and **1 of 4 Smart TVs** being shipped this year that are AVA-enabled.

Digital Trends has recognized Giraffic's AVA as a technology that "Promises to Make Netflix as reliable as Cable."

Forbes recently released 2 Smart TV review articles applauding Samsung for boosting performance in its Smart TVs by employing "clever 'stream-cleaning' technology from Giraffic to boost the efficiency of the video streams on its 2015 TVs by as much as 300%"

Giraffic Inc. launched its ground-breaking AVA technology in 2013 to help device manufacturers dramatically improve the streaming experience without requiring server or network-based intervention. "…the results of its 'stream cleaning' can be remarkable, reducing instances of buffering boosting image quality".

The results: increased engagement with Over-The-Top content, higher device usage and new monetization opportunities for OTT content.

Giraffic's Adaptive Video Acceleration™ (AVA™)

Giraffic's patented Adaptive Video Acceleration™ technology outsmarts Internet bandwidth limitations, enabling Consumer Electronic Device manufacturers to deliver broadcast TV-quality of experience over the Internet.

Through Giraffic's patented Adaptive Video Acceleration™ (AVA) technology integration into consumer electronic devices and OTT Apps, viewers can now enjoy the highest possible quality video (resolution/bitrate) over their existing Internet connection including true UHD 4K streaming, faster streaming and downloads, minimum re-buffering, without relying only on network infrastructure. Device Manufacturers now have the technology to differentiate their devices and improve streaming experience themselves for their own self operated content sources (e.g. their own OTT service, apps and software downloads, Games, firmware updates, etc), as well as any 3rd party content (e.g. Hulu, HBO Go, Amazon Prime).
Giraffic AVA enables true UHD 4K streaming averaging over 25Mbps, as well as stable and consistent Quality-of-Service for video delivery without any need for network infrastructure upgrades. Giraffic also enables smooth and stable casting between multiple devices based on standard protocols such as AirPlay, Miracast and AllShare.
Giraffic's core technology consists of 3 main building blocks: Real Time network analytics, client side HTTP network optimization and Video Playback Shaping.

TECHNOLOGY HIGHLIGHTS

Faster download speed for Progressive Download

- 3X faster on the same internet connection
- 10X less re-buffering during video playback
- Games and App downloads at a fraction the download time.

Higher resolution for Adaptive streaming

- Highest resolution over given internet connection
- Enables true and consistent UHD 4K Streaming
- HTTP/S, HLS, Smooth Streaming, MPEG-DASH

Quality of Service

- Consistent throughput during entire duration of streaming

Client-side solution

- No server side integration
- Content source agnostic

Flexibility – Any device, any OS, any protocol

- Smart TV, STB, PC, Game console, Mobile, Tablet.
- Android, Linux, IOS, Windows, MAC OS

Content Collaboration and Casting

- Sharing personal media as well as OTT devices over direct Wi-Fi (AirPlay, Miracast, AllShare, etc)

Contact information: For more information please contact info@giraffic.com or visit our website www.Giraffic.com

Adaptive Video Acceleration™

Technology:

REAL TIME ANALYTICS

- Real-time bandwidth diagnostics & connection analytics
- Intelligent utilization & routing of TCP connections
- Optimization of home router policies
- Automatic learning of ISP policy

CLIENT SIDE HTTP ACCELERATION

- Optimization of large content delivery
- Dynamic fragment sizing
- Multi-source/multi-connection http streaming and TCP pipelining
- Dynamic congestion control

VIDEO PLAYBACK SHAPING

- Dynamic buffer management
- Adaptive streaming ingestion
- Adaptive Playback shaping

AVA Throughput Improvement:

Accelerated Streaming vs. Standard HTTP