



TransAct Packager

RGB Networks' TransAct Packager enables adaptive streaming and video delivery to tablets, mobile phones, PCs, and set-top boxes in a cost-effective, distributed deployment architecture.

TransAct Packager

- Ingests H.264/AAC over MPEG-2 transport streams (MPEG-2 TS/UDP).
- Works seamlessly with RGB's Video Multiprocessing Gateway (VMG™) to receive transcoded ingest streams.
- Outputs segmented "packaged" streams suitable for HTTP delivery.
- Supports stream encryption and integration with leading third-party DRM servers.
- Available as a software license or AMS hardware solution.

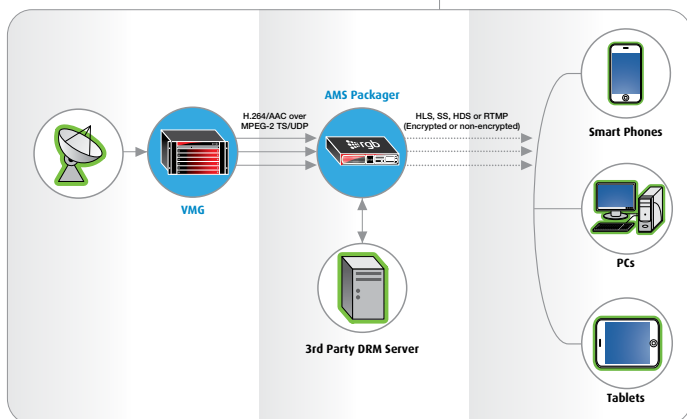
RGB TransAct Packager

Streaming video to PCs and mobile devices presents significant challenges. Network bandwidth, firewalls and infrastructure support can all create issues for video and audio network traffic. The advent of adaptive streaming technology to reach these devices has helped alleviate these challenges.

RGB's TransAct Packager segments streams using adaptive streaming technology to deliver video and audio to PCs, mobile devices, and set-top boxes. TransAct Packager ingests H.264 encoded video streams carried in an MPEG-2 transport stream (TS) and produces segmented output in Apple HTTP Live Streaming (HLS), Microsoft Smooth Streaming, Adobe HTTP Dynamic Streaming and RTMP formats. Additionally, Packager can encrypt traffic using AES-128 for HLS and PlayReady for Smooth Streaming, integrating key exchange with leading Digital Rights Management (DRM) servers.

Flexible Deployment Options

The TransAct Packager works seamlessly with RGB's Video Multiprocessing Gateway (VMG) to provide a complete transcoding and packaging solution. A key advantage of separating transcoding from packaging functionality is the ability to leverage both centralized and distributed deployment architectures.



The VMG provides a high-density, carrier-class hardware platform for the delivery of advanced video services, including high definition (HD) and standard definition (SD) video, as well as MPEG-4/H.264 and MPEG-2 video streams. The VMG transcodes multi-bitrate, multi-resolution streams that are suitable for mobile devices such as the Apple iPhone, iPad, and iPod Touch, as well as for consumption on PCs. Those streams are then sent directly to a co-located TransAct Packager or distributed over the network to edge locations for packaging the stream into Apple HLS or Microsoft Smooth Streaming.

Packaged streams are delivered directly to origin web servers or to a content delivery network (CDN) for wider distribution to end devices.



Packaging Features and Benefits

Packaging has multiple significant benefits for mobile and PC delivery.

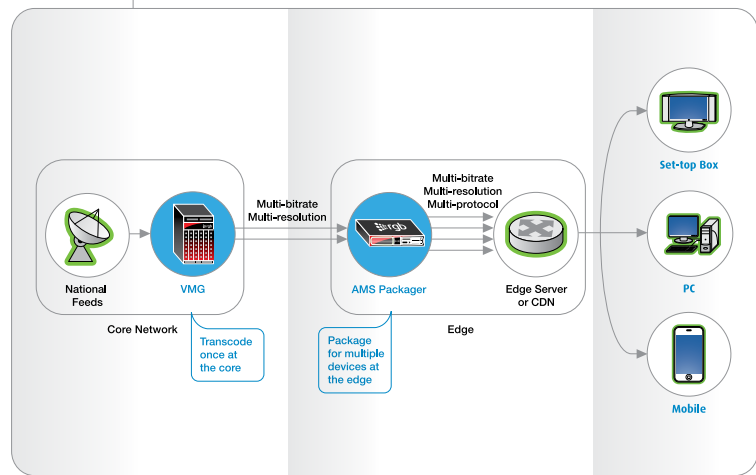
- Adaptive streaming segments video into chunks that are reliably delivered using HTTP and can be easily buffered, compensating for packet drops and temporary bandwidth changes that are common on wireless networks.
- The video is encoded at multiple bitrates and resolutions creating chunks of different sizes. A mobile client can adaptively select different chunks depending on the currently available delivery bandwidth, giving users the best possible video experience.
- Leverages standard HTTP infrastructure (including CDNs), resulting in significant cost savings over legacy streaming technologies.
- Eliminates the guesswork for content providers on what bitrates to encode for end devices.
- Works seamlessly with firewalls by leveraging HTTP as the transport protocol.
- Live and VOD workflows are almost identical. When a provider creates a live stream, the chunks can be kept for later VOD delivery.

Hardware or Software

RGB Networks offers the TransAct Packager as either a software license or as an appliance. The software license-only solution can be downloaded or shipped on a DVD and allows customers to deploy on their choice of server-based hardware platform. Running on an RGB supported appliance – the Application Media Server (AMS) – the TransAct Packager provides a minimum MTBF of 100,000 hours, as the AMS is an extremely durable hardware appliance requiring minimal ongoing maintenance.



AMS TransAct Packager



RGB TransAct Packager

INPUT	H.264 over MPEG-2 TS/UDP
OUTPUT	Apple HTTP Live Streaming (HLS); Microsoft Smooth Streaming; Adobe HTTP Dynamic Streaming (HDS); Adobe RTMP
ENCRYPTION	AES-128 for HLS; Microsoft PlayReady for Smooth Streaming
MANAGEMENT Features	Web browser GUI; Secure shell (SSH); XML-RPC 1.2; In-band / out-of-band support; SNMP traps; Remote upgrades
AMS HARDWARE I/O	Up to six Ethernet (10/100/1000 Base-T) ports
Form Factor	1 rack unit
Dimensions	1.68" H x 18.99" W x 30.39" D; 42.6 mm H x 482.4 mm W x 772 mm D
Weight	39 lbs. / 17.69 Kgs
Power	AC P/S operating in the range of 100V-240V; Nominal voltage 120V AC; 717 W, dual-line cord 1+1 PFC (dual power supply redundant configuration)
Temperature	Operating Temperature: 50 to 95° F (10 to 35° C); Relative Humidity: 20 to 80% non-condensing
Regulatory	FCC Part 15; NRTL; UL / CSA



RGB Networks, Inc.
 390 West Java Drive, Sunnyvale, CA 94089 USA
 T: +1.408.701.2700 | F: +1.408.701.2710
www.rgbnetworks.com