

# OneVantage™ Internet Streamer

Network operators have traditionally focused their efforts on the optical transport and packet switching layers of their networks for creating and improving the connectivity experience of their subscribers. Recently, however, the consumption of rich media content has come to dominate the perceived Quality of Experience (QoE) for subscribers. And as the explosive growth in this traffic is pushing networks to capacity, operators are turning to application-layer content caching and delivery services as the next source of improvement for the user experience.

This represents a fundamental shift in mindset. During the past decade operators left responsibility for sourcing and delivering content largely to global CDN service providers. However, the massive popularity of OTT content coming at the expense of network operating margins is driving operators to reinsert themselves into the content delivery value chain. By deploying CDN platforms to support a variety of new and higher quality content services, these operators are addressing a current problem and protecting their long-term competitiveness.

Verivue's OneVantage™ Content Delivery Solution is a suite of turnkey CDN technologies designed to meet the next-generation content delivery needs of network operators. The OneVantage™ Content Delivery Solution is comprised of an open network virtualization platform, installed on commodity hardware, upon which CDN software modules are deployed and managed. The OneVantage™ Internet Streamer is the IP streaming service component that adds ingest and delivery support for legacy access protocols (e.g., RTMP, RTSP) to CDN caching hierarchy.

## Product Overview

The OneVantage™ Internet Streamer is a high-performance media server that delivers on-demand and live content using protocols such as RTMP and encrypted RTMP.

The Internet Streamer provides seamless support for traditional IP streaming formats within a CDN environment. For operators looking to support such streaming technologies as Adobe RTMP, RTMPe and basic RTSP, Internet Streamer brings CDN distribution benefits across the network without the taxing and complicated workflows required by content pre-positioning.

The Internet Streamer software augments the OneVantage™ caching fabric with legacy stream-based access protocols. Internet Streamer distinguishes between the ingestion protocol used by the content provider, and the delivery protocol consumed by the end-user, and allows different ingestion/delivery protocols to be used for a given stream.



### Flexibility:

Support for diverse small and large media objects for multiple applications

### Large Network Support:

Scale-out architecture for graceful capacity expansion

### Cost-Effective:

No need for external load balancing or content pinning

### COTS Platform:

Maximum performance from commodity server platforms

## Features and Benefits

### Full CDN Integration:

The Verivue Internet Streamer leverages the same HyperCache-based caching infrastructure already deployed by an operator to cache and deliver HTTP-based content. Internet Streamer augments an existing CDN deployment by enabling alternative ingestion and alternative delivery protocols. Moreover, while the ingestion and delivery protocols are often the same, Internet Streamer allows for different ingestion/delivery combinations to be used for a given stream.

For example, a content provider might produce a SHOUTcast stream, which Internet Streamer then delivers to end-users as an RTMP stream. Similarly, HTTP can be used as an ingestion protocol, with RTMP used for client-facing stream delivery.

### Simple Provisioning and Re-provisioning:

As traffic workloads shift over time, for example, from RTMP-heavy streaming to HTTP-AS content, it is easy to shift CDN resource allocation. Without touching the underlying hardware infrastructure, the Verivue solution allows the operator to decommission Virtual Machines (VMs) assigned to Internet Streamer and assign the freed resources to HyperCache, as well as to other network services deployed on the Verivue OneVantage™ platform.

### OneVantage™ Content Delivery Solution

Verivue's OneVantage Content Delivery Solution is a complete CDN infrastructure solution for network operators. It offers the industry's most extensible design to meet the requirements of a diverse set of applications. Also available from Verivue are:

HyperCache
Management & Analytics
Request Router
VoD Streamer
Object Store
Transparent Cache