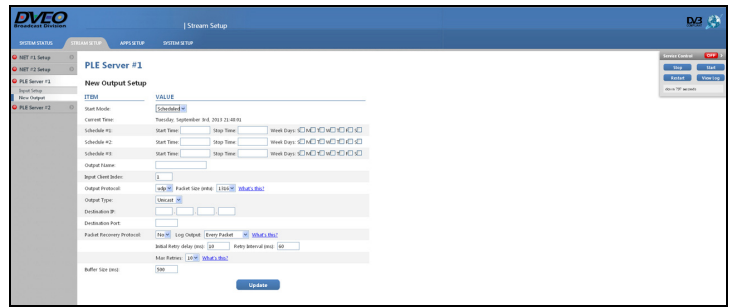




Easy to implement (ARQ) error correction and AES encrypted point to multipoint content distribution service based on DVEO DOZER™. This is a build-your-own network you set up by purchasing licenses from us. You do not buy any hardware (CAPEX) and do not maintain the hardware (OPEX). You set up your own cloud or you set up the licenses on Amazon Elastic Cloud or Azure Cloud. Target customers want to deliver content from their local source to overseas affiliates and expect significant packet loss and also desire AES128 security. Savings come in OPEX since there are minimal up front expenses and very low manpower is needed.

Features

- Addable feature to Proxicaster™, MultiStreamer™, Gearbox™, Brutus™, Gearbox™ II, and D-Streamer™ product lines
- Automated Packet Recovery: Unlike FEC protocols, it only sends extra data when packet loss is detected by the DOZER receiver and reported to the DOZER sender
- Protocol completely corrects packet loss and jitter in transmission path
- Underlying traffic is AES128 encrypted
- Typical inputs/Outputs: 2 each Gig/E ports
- Supports IP UDP unicast and multicast, in or out
- Available as a Windows® application
- Will not examine the transport stream. It merely forwards all packets.
- IP address and ports can be remapped to different ones if necessary in the remote network
- Configurable destination port on listener for firewall traversal
- Can be configured for point-to-point or point-to-multipoint functionality
- Supports up to four destinations in primary/backup or split transmission configuration for redundant or load balanced setups
- Each "DOZER instance" can be configured as a sender, a receiver, or both
- One DOZER transmitter can send 50+ channels to 32 DOZER receivers
- Each receiver device can output UDP on a local network to one or many different devices using second Ethernet port
- DOZER Transmitter-Receiver connections are authenticated with user name and password for additional security
- Performance certified with WAN Emulator Appliance testing



RELIABLE LIVE MEDIA OVER IP



Overview

IP video is now the norm in video delivery. Cloud based software is gradually taking over basic error correction since the errors are created in the cloud and they are best fixed instantly in the cloud. In fact most packet loss happens at the edge of the cloud that is near the end points.

To eliminate these edge based errors, one adds DOZER CLOUD™ licenses to the end point "DOZER instances". More precisely, to the originating streams as they leave your facility and then to the hub devices. Then again you bring up DOZER instances to destination points.

Applications

- Streaming live news and sports programming over congested LANs or WANs
- Backup to Dedicated IP for Video Delivery with delivery over Public Internet, including studio-to-transmitter links
- Replacing satellite backhaul and dedicated point-to-point lines with DOZER at end points
- Protecting point to point traffic with strong AES128 encryption
- Eliminating packet loss and jitter across Metro WDM and other long haul backbones
- Point to Multipoint Content or Data Delivery



Computer Modules, Inc.

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San Diego, CA 92127

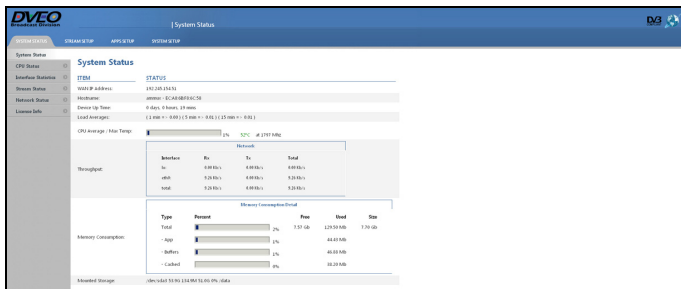
Tel: 858-613-1818 Fax: 858-613-1815

www.dveo.com

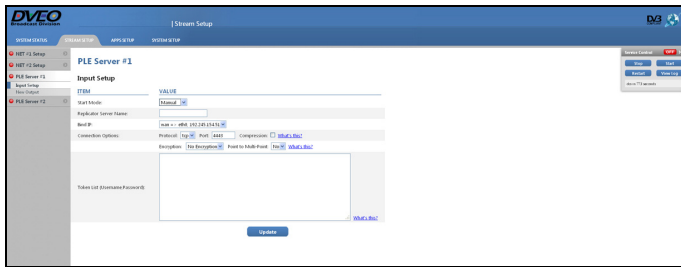
Benefits

- Smooth Error Free Delivery of Compressed Video Across Public Internet with Guaranteed Upload and Download
- Transits Most Firewalls
- Saves Money versus Private Point to Point Connections
- Can be added to most of our products and others' products
- All Content is Encrypted with AES128 between units
- Linux® based reliability
- Can eliminate need for satellite delivery of point-to-point

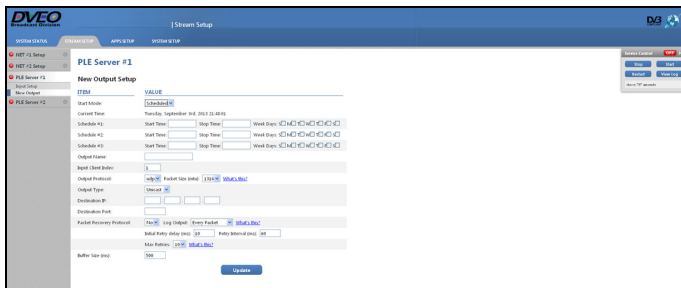
Sample of GUIs



System Status



Input Setup



Scheduled Output Setup

Ordering Information

DOZER CLOUD

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Specifications

IP Inputs: Any Digital Bitstream Connection Between DOZERS

IP protocols:	UDP with AES128
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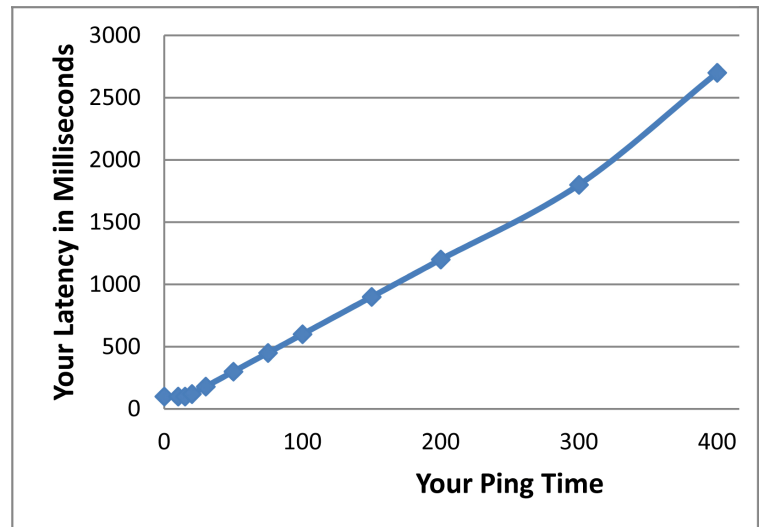
Administration

Access:	Web interface SSH (Secure command line interface), with passwords
SNMP:	Monitoring and alerts
UPTIME™:	Optional Failover software

Other

Latency:	About 6 times the Ping Time
Bandwidth Overhead:	7% typical, but depends on network issues

Chart of Ping Time vs. Latency



Cloud Licensing Pointers

1. The DOZER application affects the network interface driver of the host. It will not affect any other function of the host.
2. We will rewrite your network driver if needed.

DVEO
Digital Video ExtraOrdinaire™

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