Proxi DOZER™

Linux® Based, Real Time, 1 RU, "DOZER™" Packet Recovery Enabled Stream Segmenter, Repackager, and/or Protocol Converter for Real Time Conversion of UDP Network Streams to Multicast, Unicast, or HLS Network Streams. HLS Streams are Segmented Using Adaptive Streaming Technology. Supports 80 Streams of 5 Mbps Each or any Combination of Bitrates up to 400 Mbps Aggregate. This is an Embedded Linux® Based Appliance that Boots Quickly with a Simple GUI Interface. All Settings are Remembered when Power Cycled. Ideal WAN Bridging Device for Intercepting Streams and Reflecting and Redirecting Streams to New Locations with Different Protocols and Wrappers like HLS or RTMP.

Features

- Converts unicast streams to multicast streams, or other direction
- Designed to repackage or chunk raw H.264 transport streams to HLS. This is called segmentation.
- Input and output format can be MPEG-2 or H.264 (No transcoding)
- IP output protocols: UDP, RTP, RTMP, HTTP multicast and unicast transport stream with HTTP Live (HLS)
- Total 400 Mbps IP raw output capability. TELCO version supports 800 Mbps.
- Streams up to 80 streams total
- Optional built-in HLS server supports 500+ simultaneous users
- Transmits PAT, PMT, and PCR information
- Remote configuration management via Web Browser and Secure Shell (SSH)
- Supports NTSC or PAL
- Supports HTTP Header Authentication for HLS output
- Supports Progressive HTTP, HLS, Dash and all the typical video formats used inside HTML5 pages
- SNMP, REST, SOAP support for remote management and monitoring
- Settings are remembered when power cycled
- Based on embedded Linux®
- Carrier Grade Version: Available with 48V power supply and Fiber Interface
- TELCO Version: Available with dual redundant power supply
- Based on Intel® Xeon® CPU running customized UBUNTU Linux that is stripped down and is integrated with OS. Works like a router.
- Adds or removes "DOZER" signaling

Applications

- Accepts multiple UDP streams inputs from DOZERbox™ IP/IP + AES128 or any device with "DOZER"
- Outputs streams to devices supporting MPEG TS over RTP, HLS, RTMP, FLV over HTTP
- Redirects incoming streams to multiple destinations

Overview

The **Proxi DOZER™** is an ideal edge based hub for reliably delivering or receiving multiple streams between private and public networks. Reliability is optimized thanks to the DOZER's patented packet recovery technology. The Proxi DOZER also functions as a UDP to Multicast or Unicast Converter and HLS repackager for moving streams more efficiently in private and public networks. It receives UDP streams via public internet, dynamically corrects any packet losses, and re-streams them over an IP Network to many different devices. This unit also works well as a stream repackager that chunks transport streams to HLS. It also creates the M3u8 stream descriptors which are required.

The system supports MPEG-2, H.264, or H.265 input and output or any other type of video or non-video.

Forwarding of PIDs via IP is transparent and does not depend on the content of each individual elementary stream.

Depending on the configuration, the Proxi DOZER can act as an IP demultiplexer. The unit provides PID filtering of all unwanted traffic, increasing system performance and decreasing the number of services which will be transmitted per unit.

Programs can be forwarded (pushed) as transport stream packets via UDP or as RTP (real time protocol) payload (RFC 2250). Pushing can be either unicast or multicast. Each individual converted program channel consists of all necessary elementary streams and clocking information to present a synchronized A/V signal.

The Proxi DOZER can add HLS or RTMP wrappers on outgoing streams. With our optional Atlas™ add-on, it supports 500+ simultaneous HLS users natively.

DVEO
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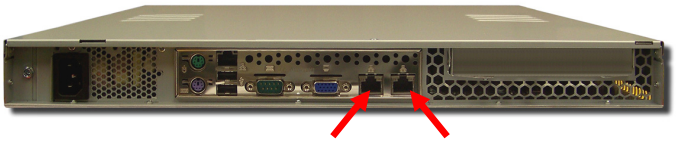
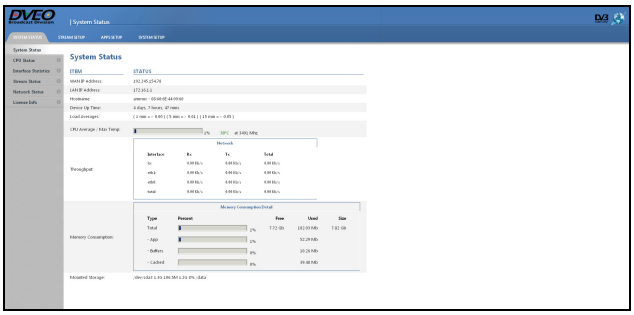
Inputs/Outputs

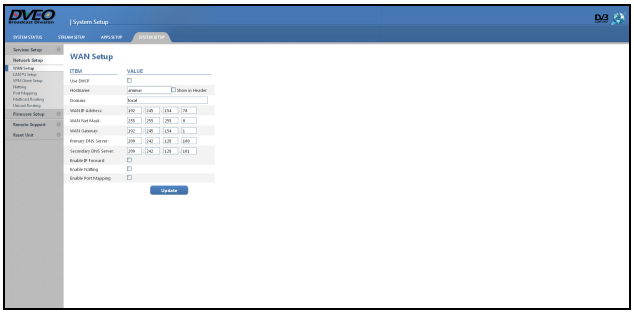


IP Input IP Output

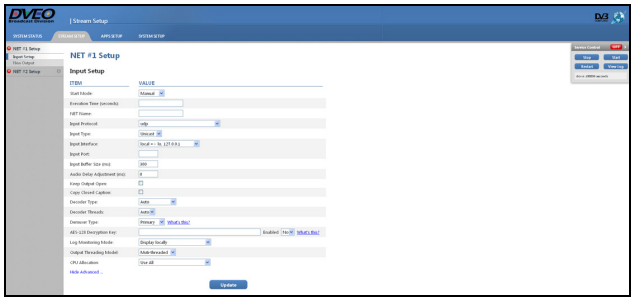
Sample of GUIs



Status Screen



Network Setup



IP Input Setup

Specifications

IP Input

Input protocol:	UDP with "DOZER"

IP Output

Output protocols:	UDP, RTP, RTMP, HTTP, HTTP Live (HLS)
Bit rate:	Up to 400 Mbps IP raw output capability
Ethernet:	2 x 1 GigE
Type:	IP-multicast, IP-unicast
Video:	NTSC or PAL

Administration

Access:	Web interface, SSH (Secure command line interface)
SNMP:	Monitoring and alerts

CPU and Operating System

CPU – 1RU:	Intel® Xeon® processor
OS:	DVEO embedded Linux® on SSD

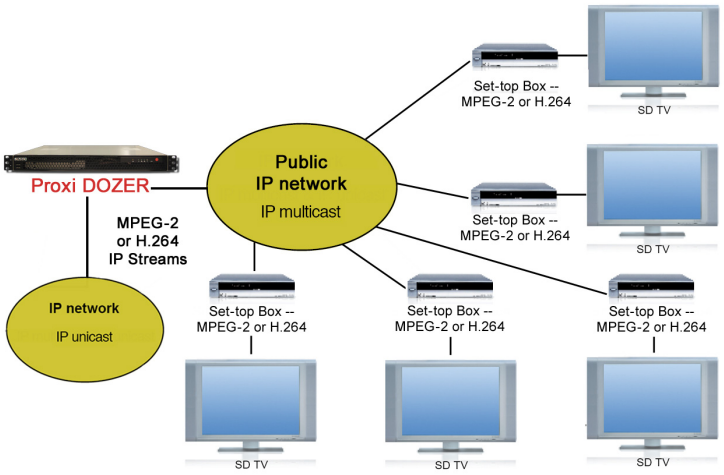
Physical and Power

Size – 1 RU high:	19 x 14.96 x 1.7 inches (W x D x H) 483 x 380 x 43.4 mm (W x D x H) (Optional 3 RU unit with dual redundant power supply)
Voltage:	100-240V, 4-2A, 60-50 Hz, 220 watts
Temperature:	10°C to 35°C
Humidity:	20% to 90% non-condensing
Weight:	15 lbs. (6.8 kg)
Conformities:	UL, BSMI, CSA, FCC, CE, RoHS

Security

Ports security scanned to MIL requirements prior to shipment

IPTV Application with STB's*



*DOZER equipped set-top boxes

Ordering Information

Proxi DOZER
Carrier Grade Version: with 48V power supply and Fiber Interface
TELCO Grade Version: with dual redundant power supply and quad GigE ports
NOTE: Transcoding – Optional add-on

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