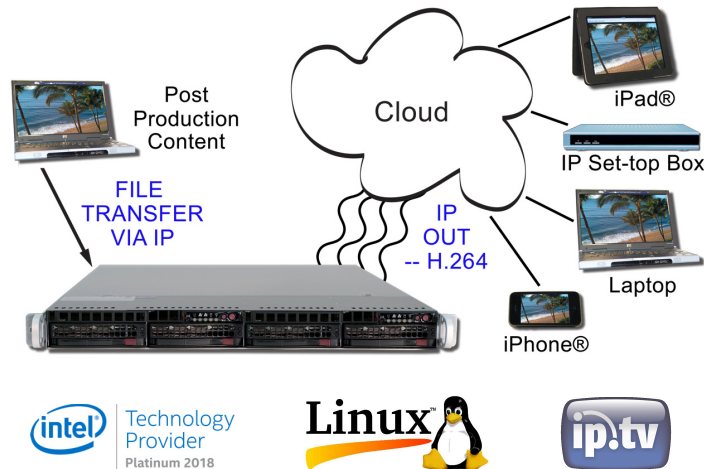


# Infinity IP Grooming Server™ 50ch 2TB

Real Time, 1 RU, Quick Starting, Embedded Linux® Based, Remotely Manageable, Multi Channel Streaming, Live Transcoding Payout Server. Incorporates a Scheduler. Runs on 1-4 Core Intel® Xeon® CPU. Relies on a "Minimal" Linux® Kernel (Residing in a Flash Memory Device) that is Highly Ruggedized and Task Optimized for Streaming Many Channels, Operated via a Friendly GUI that can be Run From Anywhere. Specifically Designed for Playing Continuous Streaming to and from Hard Drive. Outputs up to 50 IP Streams at the Same Time. Create Your Own 50 "Streaming" Web Channels with 50 Different Movies or Content Playing on Your Preset Schedule.



## Features

- Streams multiple output protocols from the on board 2 TB hard drive
- Use individual files or multiple playlists for input
- Multiple bit rates and resolutions supported
- Loopable playback
- Transcodes on the fly
- Watch Folder Mechanism for updates
- Scheduler for streaming by the clock
- Creates simultaneous High, Medium, and Low bitrate streams
- Expandable Hard Disk via SANs, etc.
- Outputs: Multiple simultaneous IP streams through GigE port (RJ45)
- IP output protocols: UDP, RTP, RTMP (Open Flash), HTTP, with DLNA support
- Support for adaptive bitrate streaming protocols such as HTTP Live Streaming and MPEG-DASH
- Supports M3u8 playlist files (standalone and through HTTP Live)
- Supports H.264 High Profile @ Level 4.0 (HP@L4) and optional H.265/HEVC
- Supports 1080i, 1080p, 720p, 480i, CIF, QCIF, qHD, H.264up and many others, and custom resolutions
- Supports 50 simultaneous output channels, with multiple resolutions and wrappers
- Tested compatible with major brands of IP devices including Amino™, Roku®, Telergy, Android™, and Apple iPad® and iPhone®
- Supports Verimatrix® VCAS™ and other rotating key servers
- Remote GUI includes some scheduling
- SNMP, REST, SOAP support for remote management and monitoring
- Can be configured for "Looping" continuously

## Overview

Many web sites now offer video streams over IP available on demand. The world however needs a multichannel web streaming oriented video server that stores transport streams and grooms them as they are pushed out.

The **Infinity IP Grooming Server™** is a multichannel payout server without the caching that allows one to view these files at any time from the beginning. It streams multiple HLS, RTMP, or .ts video and audio files from the on board SSD and 2 TB drive, with scheduled playlists. SSD's eliminate the need for RAID to obtain maximum performance.

The Infinity IP Grooming Server transcodes and adds various "Wrappers" such as HLS, RTMP, etc. The system can output many streams at the same time, with different bit rates and wrappers for each stream. The limit is the network interface.

The input of the stored content is stored on the hard drive via FTP file transfer. We are adding a drop folder soon.

Input can be individual files or multiple files. Numerous formats and file types are supported, including HLS, RTMP, H.264 ts, flv, H.264 ps, .mov, VC-1 (.wmv), mkv, and others. The Infinity IP Grooming Server also supports loopable playback.

This system is continually tested with the latest Atlas™, Adobe®, and Wowza® servers, and many CDNs.

## Applications

- Signage server for continuous streaming of multiple channels to multiple end points and devices
- Streaming Server that resides at ISP or CDN for continuous scheduled or looped streaming service to publish to your web site
- Build your own streaming utility with streams you prepared that are ready to play
- Great Movie Player for your school or small hotel
- Video Hosting for ISP's, etc...
- Stream capture and playback



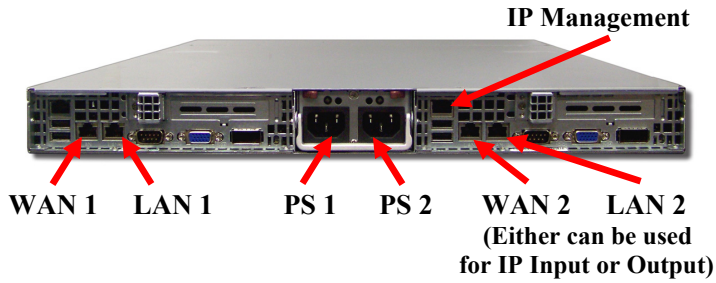
Computer Modules, Inc.

11409 West Bernardo Court  
San Diego, CA 92127

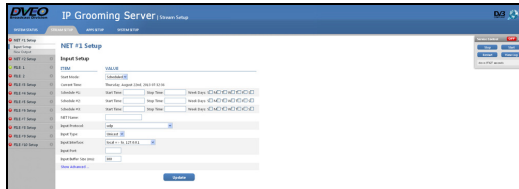
Tel: 858-613-1818 Fax: 858-613-1815

[www.dveo.com](http://www.dveo.com)

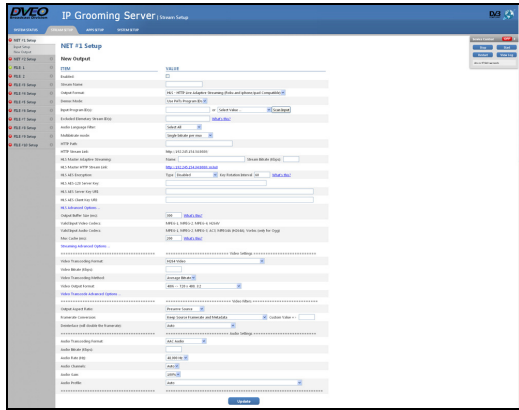
# Inputs/Outputs



# Sample of GUIs



Scheduled Input Setup



IP Output Setup

# Ports Utilized

Protocol	TCP Ports	UDP Ports
HTTP	80, 8000, 8001, 8080, 1-65535 (out)	
HTTPS	443	
RTMP		1935
RTP		6970-6999, 16384-32767

# CDNs Tested With:

1. Akamai\*
  2. Limelight
  3. Tata
  4. Octoshape
  5. CDNetworks
  6. Internap
  7. Highwinds
  8. Verizon\*
  9. Ustream\*
  10. Mirror Image
  11. Tulix\*
  12. More to come!
- \*Certified

# Ordering Information

Infinity IP Grooming Server 50ch 2TB in 1 RU system

# Specifications

## Supported Resolutions – Input and Output

1920 x 1080	720 x 480	480 x 480	qHD
1280 x 720	704 x 480	480 x 320	H.264up
720 x 576	640 x 480	320 x 240	

Also supports any custom resolution not listed here. Note: Supports closed captions.

## Input

File Types Supported:	H.264 ts, flv, H.264 ps, .mov, VC-1 (.wmv), mkv, and others
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## IP Output

Output “wrappers”:	UDP, RTP, RTMP (Open Flash), HTTP, with DLNA support
Type:	IP-multicast, IP-unicast with “wrappers”
Bit Rates:	Multiple H.264, MPEG-2, and/or optional H.265 video streams at different bit rates (.1 to 15 mbps)
Video:	NTSC or PAL

## Administration

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

## CPU and Operating System

CPU:	Intel® Xeon® 8, 14, 32, or 48 Core processor
OS:	DVEO embedded Linux® on SSD
Hard Drive:	2 TB

## Physical & Power

Size:	1.7” h x 17.2” w x 27.75d” (43 x 437 x 705 mm)
Voltage:	1200W high-efficiency power supplies with PMBus (80 Plus Rated) x 2
Power Consumption:	15 amps maximum
Operating Temperature:	10° to 35° C (50° to 95°F)
Non-Operating Temperature:	-40° to 70° C (-40° to 158° F)
Humidity:	8% to 90% (non-condensing)
Conformities:	UL, CSA, CE, RoHS
Weight:	40 lbs (18.1 kg)

## Security

Ports security scanned to MIL requirements prior to shipment
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## Ad Insertion

SCTE Ad Marker insertion via RS232, USB, IP, Contact closures
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# Block Diagram

