Features

- A simple software application that runs on all DVEO® Linux® machines
- Designed for 24/7 operation
- N+1 or N+N automatic hardware redundancy
- Hardware switches from primary to secondary and back again on command from UPTIME II
- Scalable from a few units to large deployments
- SNMP, REST, SOAP support for remote management and monitoring
- Software is professionally scanned for vulnerabilities

Applications

- Failure Protection for encoders, transcoders, decoders, etc.

Overview

Television has become a basic commodity that humans all over the world have become accustomed to as it provides mental solace in our complex world. It has become a high value business and expectation of its delivery is universal.

Powerful computers have become standard for processing digital video. Computers are highly reliable but are prone to occasional failure as they still use motors for cooling. Occasional component failure is expected even though failures are less than 1%. To minimize the impact of 1% failure, redundancy units are utilized for hot standby on most Telcos.

Our UPTIME II IP/IP offers N+1 automated failover to a spare unit for most DVEO® devices including our VOD servers, encoders, transcoders, decoders, DOZERs, etc. It was developed to provide necessary reliability to Telcos and broadcasters who must offer the best uptime possible at reasonable prices.

N+1 redundancy is a form of resilience that ensures system availability in the event of component failure. Components (N) have at least one independent backup component (+1).

The level of resilience is referred to as active/passive or standby as backup components do not actively participate within the system during normal operation.

It is also possible to have N+1 redundancy with active-active components, in such cases the backup component will remain active in the operation even if all other components are fully functional, however the system will be able to perform in the event that one component is faulted and recover from a single component failure.

An active-active approach is considered superior in terms of performance and resiliency.
Sample of GUIs

Virtual IP Addresses Setup

Redundancy Setup

Redundant Services Rules Setup

Ordering Information

UPTIME II IP/IP

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

Ports Utilized

<table>
<thead>
<tr>
<th>Protocol</th>
<th>TCP Ports</th>
<th>UDP Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTTP</td>
<td>80, 8000, 8001, 8080, 1-65535 (out)</td>
<td></td>
</tr>
<tr>
<td>HTTPS</td>
<td>443</td>
<td></td>
</tr>
<tr>
<td>RTSP</td>
<td>554, 7070</td>
<td>6970-7170, 5004 5005</td>
</tr>
<tr>
<td>RTMP</td>
<td>1935</td>
<td></td>
</tr>
<tr>
<td>RTP</td>
<td></td>
<td>6970-6999, 16384-32767</td>
</tr>
</tbody>
</table>

Specifications

Some Supported Resolutions – Input and Output

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920 x 1080</td>
<td></td>
<td>720 x 480</td>
</tr>
<tr>
<td>1280 x 720</td>
<td>704 x 480</td>
<td>480 x 320</td>
</tr>
<tr>
<td>720 x 576</td>
<td>640 x 480</td>
<td>320 x 240</td>
</tr>
<tr>
<td>720 x 480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>704 x 480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>640 x 480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>640 x 320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>480 x 480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>480 x 320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>480 x 240</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Also supports any custom resolution not listed here, including computer formats like 1280 x 1024, etc. Note: Lower resolution results in higher transcodes.

Supports PAL TO NTSC conversion but not NTSC to PAL. Supports closed captioning. H.265 output resolutions supported are 1080, 720, 576, 480. H.265 576/480 resolutions only have 4:3 aspect ratio.

Output Bit Rates

<table>
<thead>
<tr>
<th>Bit Rates</th>
<th>Multiple H.264, MPEG-2, and/or optional H.265 video streams at different bit rates (.1 to 15 mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>8 bit encoding with 4:2:0 color sampling; optional 4:2:2</td>
</tr>
</tbody>
</table>

Administration

Access: Web interface, SSH (Secure command line interface)
SNMP: Monitoring and alerts, MIBS available
Scheduling: On, Off support for timeslots

CPU and Operating System

CPU: Quad Intel® CPU server, 40 Core
OS: DVEO embedded Linux® in Flash™

Physical & Power

Size: 1.7” h x 17.2” w x 27.75d” (43 x 437 x 705 mm)
Voltage: 1200W high-efficiency power supply with PMBus (80 Plus Rated)
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)
Weight: 40 lbs (18.1 kg)
Conformities: UL, CSA, CE, RoHS

Security

Ports security scanned to MIL requirements prior to shipment

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