



Issue 81 - May 2009

## HIGHLIGHTS

- ▶ DVStor H.264 HD Content Archival
- ▶ DVStation-Mini<sup>2</sup> DVB-T
- ▶ "Stream Redundancy" Mode in the DVStation-IP<sup>3</sup>

## SEE US HERE

- ➔ BroadcastAsia 2009  
June 16-19, Singapore  
Singapore Pavilion  
Booth 8E4-01
- ➔ SMPTE Australia 2009  
July 21-24, Sydney  
Booth G35

## H.264 HD Content Archival

The DVStor now comes with native support for HD MPEG-4 content streams. The DVStor can record and archive transport streams from the GigE input or the optional ASI input. It stores the transport streams in full broadcast quality for use in quality audits or to archive broadcast content for future use.



Using the built-in video thumbnail generator, the DVStor can create thumbnails of the video assets being archived. With this timeline view of the content, operators can have a "bird's eye" view of the transmission, looking into and spotting errors easily. Clicking on a "suspect" thumbnail will play the segment in question in full quality in the same browser window for quick troubleshooting.

The DVStor is available in various capacities ranging from 500 GB to 8 TB of storage space, ensuring a model for every scenario possible.

Read on...

### Asia (HQ):

Tel: +65 6547 4935  
Fax: +65 6547 4945

### Europe:

Tel: +41 56641 0317  
Fax: +41 56500 0161

### North America:

Tel: (954) 472 5445  
(866) PIXEL US  
Fax: (212) 671 1549

## H.264 HD Content Archival continued...

With support for Direct Attached Storage (DAS), the storage capacity can be further boosted up to 120 TB. To ensure that your archival solution is operational in adverse conditions, the DVStor comes with optional dual redundant power supplies and RAID storage redundancy.



## Improve Monitoring Performance with the DVStation-Mini<sup>2</sup> DVB-T

The DVStation-Mini<sup>2</sup> DVB-T is designed with remote deployment in mind, including minimal and efficient power consumption, a compact footprint and hardware contact closures for effective and real-time event notifications. This is supplemented with SNMP and CORBA management interfaces which enable the DVStation-Mini<sup>2</sup> DVB-T to notify a central operations center about events/alarms of interest.

Portable and compact in 1RU height form-factor, the DVStation-Mini<sup>2</sup> DVB-T combines high quality DVB-T RF measurements and in-depth TS analysis. Other key features include high MER resolution capability as well as black-out and freeze-frame detection on MPEG-2 / H.264 video streams.

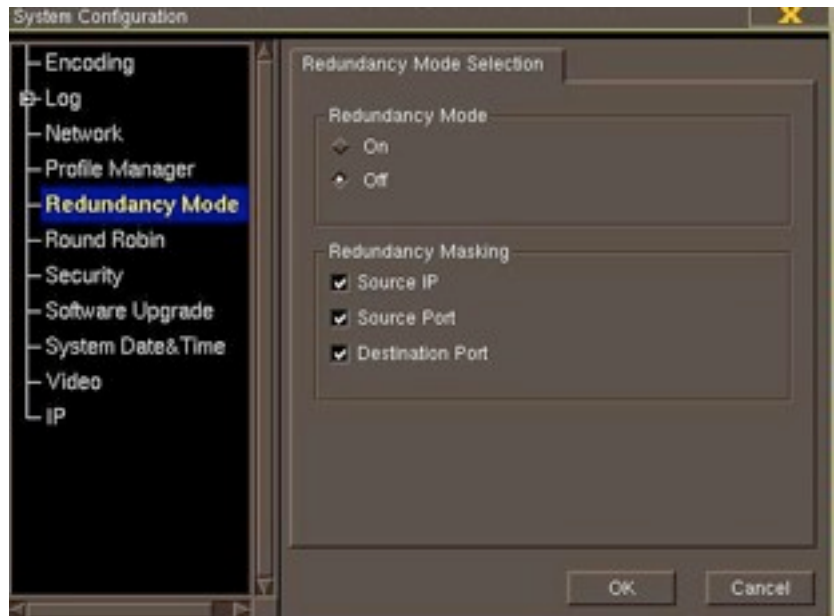


## Introducing “Stream Redundancy” Mode in the DVStation-IP<sup>3</sup>

Every content delivery system is designed, keeping in mind failure of critical in-line transmission equipment. Equipment redundancy at every stage of content processing to delivery to the final customer is a must. One of the most important metrics to determine the operations success of a television network is the availability of the channel. Time means dollars – every second of drop-out can cost the provider tremendous loss in advertising revenue and churn of customers.

A channel, usually distributed in multicast mode, is traditionally mapped to a destination IP address as its unique attribute. Whenever the redundant encoder takes control, the destination address of the channel, as an IP flow in the system for that channel, remains the same. An IP flow in the system is however recognized using many other attributes - the source IP address (which is the encoder IP usually), the source port and a destination port.

The DVStation-IP<sup>3</sup> now introduces a stream redundancy mode. For example, in most systems today, whenever there is an encoder failure, a hot-standby redundant encoder takes control and maintains channel availability at all times.



The DVStation-IP<sup>3</sup> provides a “stream redundancy” mode that allows automatic recognition and monitoring of the stream from the redundant encoder. In this mode, the user can mask attributes like source IP, source port and destination port, and allow recognition of the redundant stream purely on the basis of the destination IP address or a combination of unmasked parameters and monitors it automatically. The system periodically scans the streams monitored and based on the mask settings recognizes the redundant stream on failure of any currently monitored stream.

## Tradeshhow Reports

### NAB, Las Vegas

Pixelmetrix featured its multitude of DTV quality of service solutions at the recent NAB.

Customers and keen onlookers saw the **Remote Viewer Quality Monitoring** with the Electronic Couch Potato™ (ECP) and Consolidator Engine™; **IP Traffic Generation and Monitoring** with the DVStation-IP<sup>3</sup> and **8PSK/DVB-S.2 Test and Measurement** with the Emmy® Award winning DVStation-210 and DVStation-Mini; **Transport Stream Recording with Transrating** demonstrating the functionality of the DVStor; **Automated Quality Assurance** presenting the VISUALmpeg Qualify; **Cost-effective MPEG-TS Analysis** illustrating support for DVB and ATSC, as well as **End-to-end IPTV Monitoring** with EndGame™.

At the NAB Telecom2009 Conference, Amit Sood spoke about “Television is more than Video over IP”, covering the concept of delivering video over existing IP networks and overcoming challenges the IP media presents in delivering content.



## Tradeshaw Reports

### CCBN, Beijing

Pixelmetrix was represented at this event by our distributor, Joint System. Demos included solutions for the terrestrial, satellite, cable and digital TV operators who attended the show.



### Computer Games & Allied Technologies Conference, Singapore

Danny addressed attendees at the conference on The Threat of Over the Top Content, touching on the demand for interactive experience, impact on broadband operators, challenges imposed and how to integrate a robust platform to deliver interactive applications to television viewers.



### IPTV World Forum, London

Danny Wilson was a panelist in the Managing Quality of Service audience soapbox session at the IPTV World Forum in London. This session focused on Providing Effective Customer Support in a Converged IPTV Environment

His discussion revolved around customer support system, service support and customer self-provisioning, overcoming the complexity of new networked home environment and the role of retail and service networks.

# DVStation

# DVStor

# DVShift

## About DVStation

Pixelmetrix has focused on creating a single self-contained monitoring station that can analyze thousands of parameters within hundreds of digital television signals. Through the use of plug-in modules and parallel processing, it can monitor all these parameters real-time, simultaneously and continuously. Whether it is monitoring for compliance of an RF carrier, MPEG transport stream, picture quality or program content, development efforts are targeted at assuring the quality of the signal, integrity of the program service and delivery of essential technical information to the right people, in a timely and meaningful manner.



The DVStation-Remote is a compact version of the flagship DVStation, ideal for smaller-sized facilities. Consisting of one to four book-sized Pod modules and a single 1U rack-mounted Remote Controller, the system is operated through a LAN or dial up telephone, allowing database or user access from a personal computer.

The DVStation-Pod is a low-cost tool that can analyze and troubleshoot digital broadcast signals. Lightweight and portable, it easily slips into a tool case. DVStation-Pod borrows most of the advanced features of the DVStation, including its extraordinary user-friendly interface, on-board transport stream capture, internal playback and analysis, as well as error and measurement logging.



The DVStation-IP<sup>3</sup> offers a one-stop monitoring engine for IP and Transport Stream Analysis, detailed service visualization and IP Headend Output verification for IPTV networks. It provides, on all services, MPEG-2 and H.264 main profile thumbnails, Media Delivery Index (MDI) which allows packet loss and jitter measurements as well as video presence, freeze or blackout displays.

The DVStation-Mini provides a compact and cost-effective way for terrestrial, cable and satellite operators to maintain visibility of network quality and performance. It offers comprehensive TS monitoring and is optimized for remote site deployment.



## TS Time Shift

This unique product is ideal for delayed re-broadcast across time zones and provides stable, user-programmable delays from seconds to days.



# DVShift

DVShift is a great improvement over the conventional approach of utilizing separate audio/video delay equipment which simply does not work with the

advent of multi-channel audio, multiple subtitles or closed captioning, and especially so with multimedia content such as MHP.

## TS Recording & Playback

The DVStor system provides real-time recording and playback of MPEG transport streams over a pair of ASI interfaces.



# DVStor

Capable of recording more than three days of MPEG-2 transport stream, the full integration with our DVStation Preventive Monitoring platform

means past alarms and errors can be fully investigated and analyzed.

### Asia (HQ):

Tel: +65 6547 4935  
Fax: +65 6547 4945

### Europe:

Tel: +41 56641 0317  
Fax: +41 56500 0161

### North America:

Tel: (954) 472 5445  
(866) PIXEL US  
Fax: (212) 671 1549

info@pixelmetrix.com  
sales@pixelmetrix.com  
www.pixelmetrix.com