

HIGHER EDUCATION



Video production is an integral part of contemporary study courses at many universities and colleges of higher education. In today's media-driven society, the creation of high quality audiovisual content is seen as a core skill for students studying journalism and film-making as well as PR, marketing and a wide range of other disciplines.

The value of audiovisual content also extends far beyond the confines of the lecture room. A literature course leader can bring classic works to life with a montage of illustrative extracts from film or television dramatisations. A complex scientific experiment can be conducted once and recorded on video for repeated viewing by successive classes of students. Footage captured during an overseas trip can provide invaluable insight into the language and culture of another country for humanities students.

Traditionally, educational establishments have created their own AV content using tape-based acquisition and editing. This, however, presents a number of fundamental limitations. Tape, by its very nature, presents an environment that does not actively foster collaborative working for a classroom of students or a small workgroup: only one student or teacher can work on one piece of content at a time. Similarly, tracking down exactly the

right piece of material from a videotape library can be a slow, uncertain process.

Over recent years, non-linear production workflows already familiar to the broadcast industry are gradually being adopted by the tertiary education sector. In today's network-oriented environment, Sony HDXchange allows academic institutions to create their own high quality High Definition productions for distribution via videotape, DVD, the web, mobile devices or campus-wide digital signage systems.

With HDXchange, High Definition (and Standard Definition) content from a wide range of sources is stored centrally and made instantly available to students and other workgroup members for browsing, shot selection, editing, finishing and distribution.

As well as accelerating the production process and helping to ensure a high quality product, tapeless workflow opens up the possibility for true collaborative workflow. This means that a group of students can access and work with shared media content via their own networked PCs – with or without the supervision of a lecturer or course leader.

Scalable, reliable and highly cost effective, HDXchange offers the perfect solution for academic institutions that need to create great-looking content – quickly and affordably.

HDXchange

Ingest, Share, Edit, and Manage HD & SD Content in a Single, Seamless Workflow.

www.sonybiz.net/np



Multimedia content has a wide range of applications in colleges and universities.

These include:

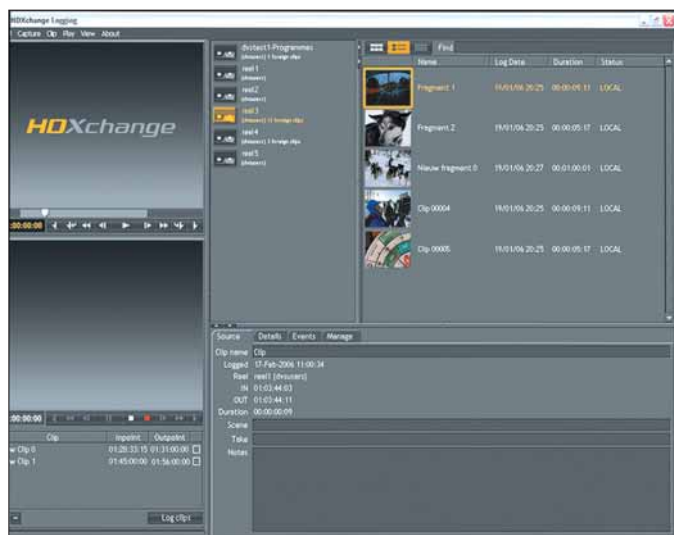
- Giving students hands-on experience of modern media production
- Creating 'bespoke' teaching materials for use in the lecture theatre or seminar room
- Archiving a college's activities – sporting, cultural or scientific
- Creating broadcast-quality materials for external publicity of the college's activities and achievements (e.g. local/regional news programmes)
- Promotion/marketing to prospective students via the college's web site

1 Superb picture quality

HDXchange stores up to 250 hours of true High Definition content in a 'native' environment without transcoding or additional compression. This assures superb picture and sound quality right through the production process to delivery of the finished programme.

2 Powerful metadata handling

HDXchange simplifies true collaborative working through its powerful yet easy-to-use metadata handling capabilities. Once HD content has been ingested from tape or disc to the system's central server, clips can be freely browsed and searched via creation date, original author, current owner, duration, timecode, keyword and other criteria. This dramatically speeds up the process of tracking down the right clip from hundreds – or even thousands – of separate items of content that may be resident on the central server. The system's SQL-compliant database also allows text-based shot markers to be added to clips by students or course leaders at any time. For example, every score in the course of a football tournament can be flagged with the keyword 'goal', making it quick and easy to track down relevant clips for a match highlights package. Alternatively, a lecturer can label key scenes in a television dramatisation that has been dubbed from DVD or videotape, allowing instant access to a relevant passage of dialogue during the course of a lecture.



HDXchange – Ingest GUI



HDXchange – Browse GUI

INGEST

STORE

SHARE

MANA

3 A choice of acquisition options

HD content can be derived from a number of sources, including the latest generation of compact Sony camcorders that combine exceptional portability with superb HD picture and low running costs. Content acquired on tape (HDV, DV or DVCAM), hard disk (HDD) or professional disc (XDCAM HD) can be ingested directly into the system's core server, where it is instantly made available to all networked users on the system. In particular, HDXchange offers an extremely 'format friendly' solution for users of Sony non-linear acquisition formats, assuring seamless compatibility with the latest generation of Sony XDCAM and XDCAM HD optical disc production tools. With XDCAM HD as the acquisition source, HDXchange can selectively ingest chosen shots from disc at 2x faster than real time – slashing project timelines compared with traditional ingest from tape. In addition, HDXchange can accept live feeds from a connected studio camera or other content providers.

4 Streamlined workflow

During ingest, HDXchange automatically stores browse-quality MPEG4 proxies of all media clips. This allows clips to be searched and viewed by workgroup users with minimal network bandwidth overhead. Original full-resolution clips are stored centrally until they are required for final editing.

Once initial shot selection has taken place, storyboards can be exported to other network users as standard HTML files. This allows other users on campus to review projects – either as basic text-based storyboards or with linked media – even if they don't have an HDXchange browsing/editing client application installed on their PC.

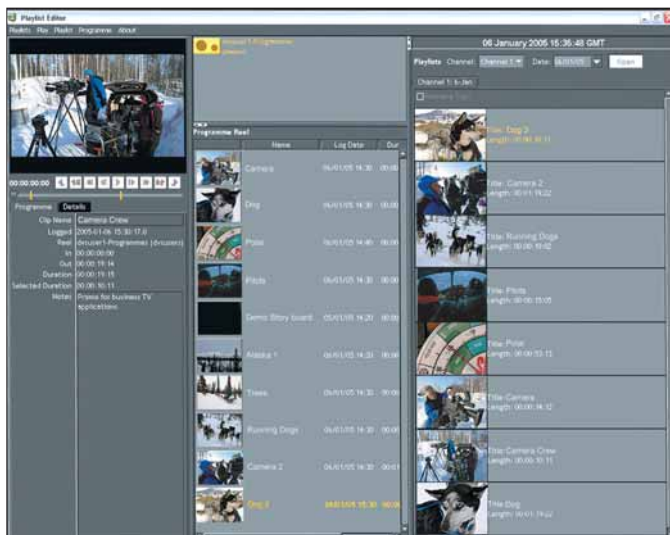
5 Simple, secure web-based administration

HDXchange offers an ideal environment where a large number of distinct projects can be stored concurrently on the core server. A web-based administration tool allows course leaders to manage individual students' access rights and storage quotas from any client PC on the network. Routine maintenance tasks such as license management can also be managed via the same user-friendly interface. System administration rights can be assigned on a per-user basis with password-protected access, safeguarding against unauthorised deletion or alteration of files and modification of system settings.

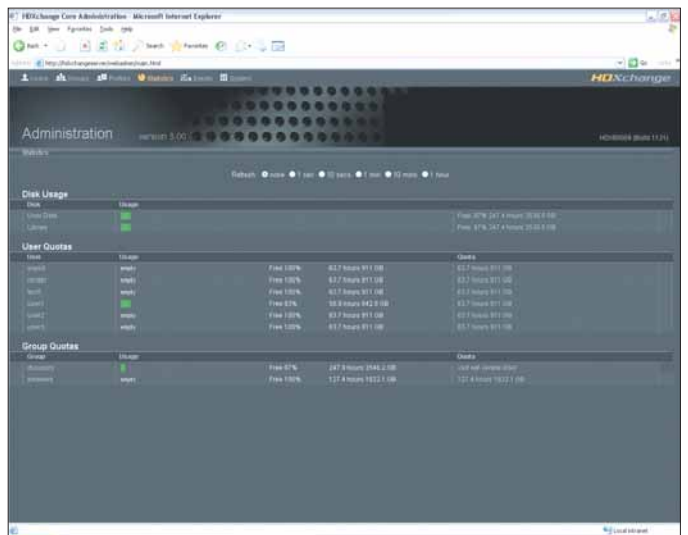
6 Versatile editing and playout options

Students and teachers are free to edit and finish programmes using their preferred non linear editing application. Support is currently provided for Apple Final Cut Pro and Sony Vegas. In addition, basic cuts editing can be performed using the system's on-board browsing application.

Finished stories can be pushed to a networked playout server, logged and archived or written directly to tape or disc for distribution. Content can also be readily repurposed for dissemination via digital signal or mobile devices.



HDXchange – Export GUI



HDXchange – Admin GUI



HDXCHANGE: THE CHOICE FOR HIGHER EDUCATION

Based on open standards and offering a superb price-to-performance ratio for educational users, HDXchange makes networked High Definition and Standard Definition media creation accessible to colleges and universities.

HDXchange represents a true collaborative environment where students can work on their own projects, either individually or collectively. Just as important as the system's power and flexibility is its simplicity. Installation of applications and set-up is quick and fuss-free, even for non-IT specialists.

Networked content management with HDXchange **THE BENEFITS AT A GLANCE**

- Complete solution for collaborative media production
- Excellent compatibility with Sony HD and SD formats (HDV, XDCAM, DV)
- Runs on standard IP networks
- Open platform with support for choice of popular third party non linear editors
- Centralised storage of content and metadata facilitates collaborative working between project group members
- Powerful media management tools based on rich metadata and low-resolution proxies
- Easy archive integration
- Versatile content delivery options: videotape, disc, web streaming, digital signage, mobile devices
- Quick and simple to configure, learn, use and expand

KEY FACTS

CPU	Dual Xeon
System memory	2GB ECC RAM
PSU	2 + 1 Redundant Power Supply
Operating System	Red Hat Linux Enterprise Server V4
Network	Dual 1000Base-T
Database	MySQL
System disc	2 x 80GB (RAID1 configuration)
RAID Composition	16 media drives, RAID 10 configuration
RAID Capacity	4TB (approx 250hrs of storage @ 25Mbps)
RAID Controller	Dual Configuration
Internal HDD interface	Serial-ATA Hot-swappable

HDXchange