



XDCAM

Compatibility Guide

XDCAM[™]
Professional Disc System




Final Cut Studio 2

Final Cut Studio 2 is the new standard for HD post-production, with integrated, real-time tools designed to help you deliver beautiful HD programming on impossibly tight deadlines. Start with Final Cut Pro for editing of virtually any format – DV, SD, HDV, DVCPRO HD, XDCAM HD, fully uncompressed HD as well as Apple’s new ProRes 422 production format. Add 3D motion graphics in real time with Motion, the fastest way to animate and express your creative vision. Sculpt, mix and repair audio using Soundtrack Pro, the only audio application designed from the ground up for HD production work. Finish with Color, the newest addition to the Studio, that allows professional color grading that can elevate the quality of any production. Finally, deliver your finished production in the format of your choice using Compressor.



Final Cut Studio 2

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
 DVCAM
 MPEG HD (35/25/18 Mb/s),
 50/60i, 25p, 30p, 23.98p

1. Connecting to XDCAM

You can choose two types of XDCAM Professional Disc™ device to use with Final Cut Pro:

XDCAM decks and camcorders, connected through i.LINK to your Mac with *File Access Mode (FAM)* activated.

PDW-U1 stand-alone XDCAM drive, connected through USB 2.0 to your Mac.

In both cases, when a Professional Disc is inserted into the drive, it will show up in the Finder, just like any other removable storage.

2. Import to Final Cut Pro

Select *File>Import>Sony XDCAM...* to launch the import window of the XDCAM Transfer application, which will be connected to your Final Cut Pro project. Metadata will be automatically transferred from the XDCAM disc and thumbnails will be generated for each clip; this information is cached on your Mac enabling the disc contents to be viewed while the disc itself is not connected. Optionally, the proxy version of each clip can also be cached on your Mac. The clip metadata includes information about A/V format, bit-rate, number of audio channels and so on.

Key workflow features of the XDCAM Transfer application are:

1. Frame-accurate preview and sub-clip creation using proxy video
2. Preview of clips and XDCAM clip lists (sequences)
3. Full support for XDCAM essence marks and Final Cut Pro clip markers
4. Full metadata searching capability
5. Direct preview of full-quality material from XDCAM disc (full-screen mode)
6. Metadata logging and write back to XDCAM disc
7. Generation of printable shot lists

Once entire or sub-clips have been selected, a single click will transfer the material to the connected Final Cut Pro project. While the transfer takes place, you are able to resume editing within Final Cut Pro - the transferred clips will drop into the project bin in the background. Support for arbitrary XDCAM filenames and title metadata means that the clips will appear in the project bin with easily-recognised names.

Note: Some of the functions described in this document will be available in the October '07 version of XDCAM Transfer Software after IBC2007.



3. Export back to disc

Once editing of your sequence is complete in Final Cut Pro, the high resolution content may be exported back to Professional Disc media as an XDCAM-compatible MXF file. Alternatively, the MXF file may be written to any connected storage device, for example, a video server.

Select *File>Export>Sony XDCAM...* to open the export window of the XDCAM Transfer application. Here you can select the target location for the exported MXF file, as well as control the settings used during the export process.

As with the import operation, once Final Cut Pro has completed any required rendering of your sequence, the transfer to your chosen destination takes place in the background - leaving you free to resume editing.

Note: PDW-U1 Export Function will be implemented in the next available release of the Oct. '07 version of XDCAM Transfer Software.



* "XDCAM Transfer Software" is distributed by Sony.

Contact

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Phone 408-974-1010

Website www.apple.com/finalcutstudio

Sony Electronics Inc. (USA)

Website www.sony.com/XDCAM

"XDCAM Plug-in Software for Final Cut Pro"
Information is available on the above
Web sites.




In the field or the edit suite, Avid editing systems give you the tools to work quickly and efficiently: XDCAM proxy media can be imported much faster than real-time so editing can begin almost immediately, while only the required high-resolution material is imported to complete the project, saving time and disk space.

All XDCAM formats in SD and HD are supported natively* and can be mixed and played in a single sequence in real-time, even together with proxy media as well as other supported SD or HD video resolutions. And when the program is finished, it can be written back to the XDCAM disc with a single menu command.

With Avid editors attached to an Avid Unity™ MediaNetwork™ or Avid Unity ISIS™ system, XDCAM media is instantly available in real-time to editors, journalists and producers. Furthermore, feed room operators, media logging assistants and reviewers can access the XDCAM media from their desktop and contribute without waiting for an edit suite.

This is how Avid supports XDCAM and incorporates it into the most efficient end-to-end workflow available, with complete access, flexibility and control at any point.

Avid® NewsCutter® family
 Avid Media Composer® family
 Avid Symphony™ Nitris®
 Avid Xpress Pro*
 Avid Liquid™ family

* Avid Xpress Pro does not support IMX resolutions

Supported File Formats

DVCAM
 MPEG IMX (30/40/50 Mb/s)
 MPEG HD (18/25/35 Mb/s)
 MPEG-4 proxy media

i.LINK workflow for all supported Avid editors, using File Access Mode

Make sure the XDCAM device is set to FAM (File Access Mode) and is attached via i.LINK. The device will show up as a removable drive on the editor CPU.

Proxy editing workflow (Avid Liquid workflow is similar)

1. Select a bin and choose the Import XDCAM Proxy menu command to import all proxy media from the XDCAM disc.
2. Edit the media in the normal way on the timeline. Other SD and HD resolutions can be edited and played together in real-time.
3. When the editing is finished, select the Batch Import menu command. This will import the high-resolution XDCAM media from the disk, but only the media that is required for the edited sequence, plus a selectable handle length.

High-resolution editing workflow (Avid Liquid workflow is similar)

1. Select a bin and choose the Import menu command and navigate to the Clip folder on the XDCAM disc, or simply drag the media files from the Clip folder on the XDCAM disc into the required bin.
2. Edit the media in the normal way on the timeline. Other SD and HD resolutions can be edited and played together in real-time.

Write-back workflow (Avid Liquid workflow is similar, and only for SD)

1. Select the finished sequence in the bin.
2. Select the Export menu command and choose the XDCAM option. The edited program will now be written back to the XDCAM disc.

Network-attached workflow for Avid NewsCutter, Avid Media Composer and Avid Symphony Nitris, using File Transfer Mode

Make sure the XDCAM device and Avid editing system are connected via an Ethernet network to an Avid Unity TransferManager or Avid Interplay Transfer server; or the Avid Unity TransferManager or Avid Interplay Transfer running in standalone mode on the Avid editing system.

Ingest workflow (proxy and HD import supported with Avid Interplay Transfer only)

1. From the supported Avid editing system, select the FTPClipList Utility.
2. From the list of XDCAM clips displayed, select the required ones, and if using Interplay Transfer whether proxies or hi-res media is required, and drag them to the bin. Confirm that the clips should be transferred now. The transfer will start.

If required, the transfer status can be monitored from the Avid Unity TransferManager or Avid Interplay Transfer status window.

Output workflow

- To move the completed program to an Avid AirSpeed or other supported playback server, select the Send To Playback menu command and choose the appropriate device from the list of playback destinations.
- To move the completed program to an Ethernet connected XDCAM device, select the Send To Playback menu command and choose the appropriate device from the list of playback destinations (Avid Interplay Transfer only).
- To move a version of the complete program with associated news text to a web server, use the Post To Web function from the NRCS Tool (Avid NewsCutter only).



Contact

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EDIUS Broadcast NLE software provides native editing and realtime processing of HD, HDV, DV, uncompressed SD, MPEG-2, and MPEG-1 formats. With its seamless realtime workflow, EDIUS lets professionals mix and share video content in multiple formats and work with unlimited video, audio and effects layers, while providing realtime, high-quality display. EDIUS delivers increased quality and realtime performance through the company's acclaimed variable-bitrate Canopus HQ codec. EDIUS includes features such as batch capture from 1080i, 1080p and 720p HDV sources, advanced audio tools and precise color correction controls, to help editors create the highest quality productions.

EDIUS Broadcast

Supported File Formats

MPEG IMX (50/40/30 Mb/s)

DVCAM

MPEG HD (35/25/18 Mb/s)

EDIUS and XDCAM Workflow

Select & Register

- Connected via i.LINK or an XDCAM FTP server, choose XDCAM Select from the Capture menu. Select the clips you would like to work with, right-click and select Register to Bin.



Editing with proxies

- To edit with proxy files only, from within the Download window select Download after register > Proxy Download. Choose the files you want to work with and press Register to Bin. Proxy data is indicated by a P on the thumbnail, and it can be edited in the timeline as you would any other footage.

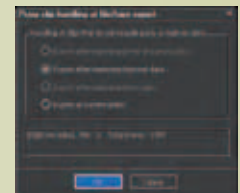
Auto-conforming from proxies

- Edit your entire project using proxies, select XDCAM HD Exporter, give the project a name and location, and you will see a further dialog box relating to proxy clip handling



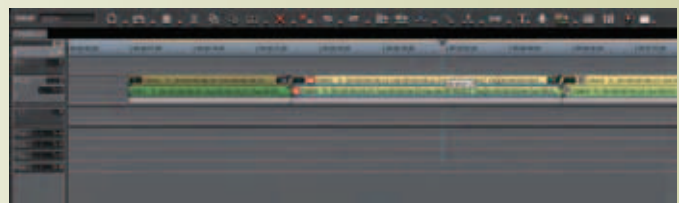
Auto-conforming from proxies

- Choose Export after Importing Hi-res Data and the hi-res data will be automatically inserted to create the final output.



Editing with hi-res data

- If disc space is not an issue, you can check Hi-res Download and Proxy Download. Proxy files are copied in a matter of minutes, but the hi-res files will take some time. But you can still edit using proxy files while the hi-res data is transferred in the background. You will see a dynamically changing timeline as the data transfer plays catch-up.



Contact

Grass Valley

Phone 888-899-EDIT

Website www.canopus.com






Dayang's editing systems are designed to link seamlessly with Sony's XDCAM system, enabling fast and efficient editing. The two systems can be connected via i.LINK or Ethernet. For both post-production and news editing environment, the editors can browse clips and create the mark-in/out points of the content prior to importing, resulting in great reduction of importing time. The content can be imported into the Dayang system as Proxy Data where preliminary editing can commence immediately, resulting in an initial edit decision list. This EDL is used as the basis of precise editing and the metadata is subsequently written back to the XDCAM disc. The high-resolution AV content can then be edited precisely using the clip list as a guide, enabling the completion of the entire project. As such, the time taken to import the Proxy Data are reduced and save editor's disc space.

Alternatively, the high-resolution AV data can be ingested directly for final on-line editing. After editing, the content can be exported to any disc media as an MXF or any other formats file concurrently with the video content as well as the Metadata such as Essence Mark and Shot Mark. This process enables high operational efficiency.

Dayang's editing systems will support PDW-U1 to import low-res video with high-res audio.

*Actual workflows will vary with different Dayang editing system. Please contact Dayang Technology Inc. for more information.

D³-Edit HD series
D³-Edit 7000 series
D³-Edit 5000 series

D³-Edit 3000 series
D³-Edit 2000 series
D³-Edit 1000 series

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
DVCAM
MPEG HD

i.LINK (File Access Mode) - Import Proxy Data

1. Import Proxy Clips into the Dayang system through i.LINK (File Access Mode) interface

To import Proxy Data, the following methods are available:

- Can choose to indicate all clips or only clips that have Essence Mark and Shot Mark (which were added by users on the XDCAM device or a PC running the PDZ-1 software).
- Support batch capture and the batch list can be exported to disc for further editing.
- Proxy Audio Data can be converted from its original 8 kHz to 48 kHz for higher sound quality.
- Metadata such as Essence Mark and Shot Mark can be imported together with AV data, allowing the users to search the material easily using the metadata as the track-down point during editing process.

2. Edit Proxy Data

The Proxy Data is edited using the editing functions available in the systems such as 2D&3D effects, caption overlay, quick composition, graphics & titling.

3. Import the high-resolution MXF files corresponding with the Proxy Data on the timeline

4. Edit the imported high-resolution material

The imported materials are edited using the standard editing functions available on the systems.

5. Write the created high-resolution sequences onto Professional Disc media as an MXF file in MPEG IMX, DVCAM or MPEG HD format

i.LINK® (File Access Mode) - Import MXF Files

1. Import high-resolution MXF files into the Dayang system through i.LINK (File Access Mode) interface

To import MXF files, the following methods are available:

- Can choose to indicate all clips or only clips that have Essence Mark and Shot Mark (which were added by users on the XDCAM device or a PC running the PDZ-1 software).
- Support batch capture and the batch list can be exported to disc for further editing.
- Proxy Audio Data can be converted from its original 8 kHz to 48 kHz for higher sound quality.
- Metadata such as Essence Mark and Shot Mark can be imported together with AV data, allowing the users to search the material easily using the metadata as the track-down point during editing process.

2. Edit the imported high-resolution material

The high-resolution material is edited using the standard editing functions available in the systems such as 2D&3D effects, caption overly, quick composition, graphics & titling.

3. Write the created high-resolution sequences onto Professional Disc media as an MXF file in MPEG IMX, DVCAM or MPEG HD format

Contact

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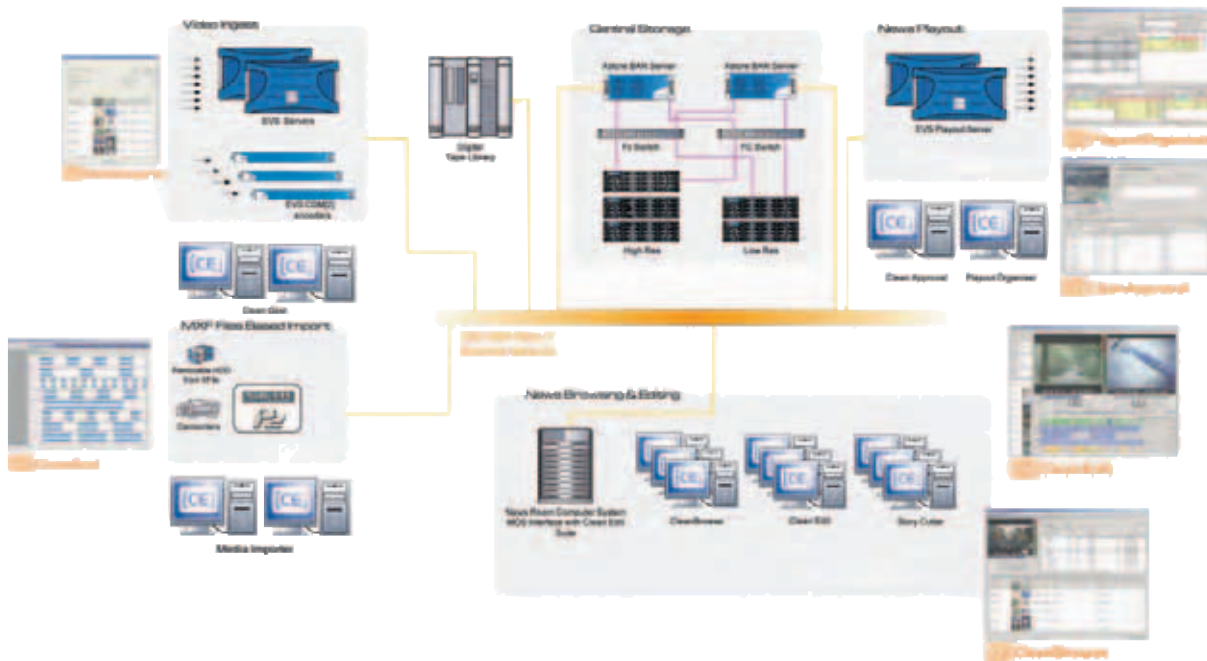
Website www.dayang.com



EVS CleanEdit(Suite) is an end-to-end news and sport production system. The fully redundant modular design allows the system to be scaled to meet the most demanding workflow requirements and to be tailored to any newsroom environment. The editing tools allows journalists and editors to work intuitively and since no rendering is ever required, news can be broken to air in a flash. (CE)MediaImporter module allows the import of many different file types (video, audio or graphics) and natively integrates Sony XDCAM formats. Thanks to the asset management functions, an operator can give a description, choose a category and sub-category for fast indexing in the CleanEdit Central Database. The thumbnail viewer as well as the low-res proxy speed up and ease the entire process. As an option, media Importer also allows the merging of several XDCAM clips and even offers transparent high quality audio browsing of XDCAM proxy content. The process of exchanging files directly with an XDCAM drive is fast and simple.

CleanEdit(Suite) V 2.0.

- Supported File Formats**
- MPEG IMX (50/40/30 Mb/s)
 - DVCAM
 - MPEG HD (35/25/18 Mb/s)



Contact

EVS
EVS, Sales & Marketing
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Geevs video servers support the capture and play-out of broadcast media in a wide range of formats, including MPEG-2 and DV25. MXF compliance built into Geevs allows files from XDCAM to be simply dragged and dropped into Geevs storage automatically updating the clip information database. Close integration between Geevs and XDCAM ensures that recorded material is captured transparently by Geevs and is then immediately available for editing or play-out. Interoperability could not be simpler.

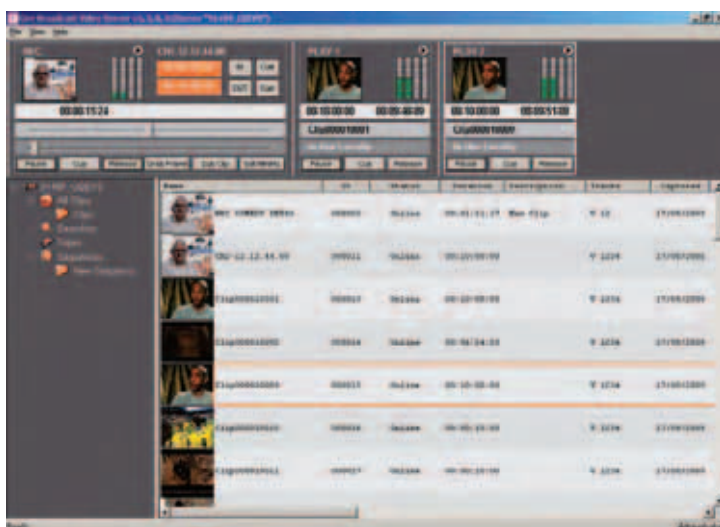
Geevs SD, SDE, MR and MR+

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
DVCAM

Geevs ingest/playout servers allow for a highly flexible integration with XDCAM solutions.

1. Import full resolution media and Proxy Data through a 1GB Ethernet Interface
2. Create Clips by browsing Proxy Data
3. Edit the Media using Geevs clients or any 3rd party XDCAM editing solution such as "Lightworks", "Sony" or other mainstream editing applications.
4. Export XDCAM media via standard networks, including 1GB Ethernet, directly to the Geevs play-out server for program production or transmission.



Contact

Gee Broadcast Systems Ltd

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Phone +44 1256 810 123

Website www.geevs.co.uk

The above information has been provided by Geevs.

LIGHTWORKS

Lightworks Editors support the capture and play-out of broadcast media in a wide range of formats including MPEG-2 and DV25. MXF compliance built into Lightworks allows files from XDCAM to be simply imported into Lightworks projects updating the clip information database. Close integration between Lightworks and XDCAM ensures that recorded material is imported transparently and is then immediately available for editing.

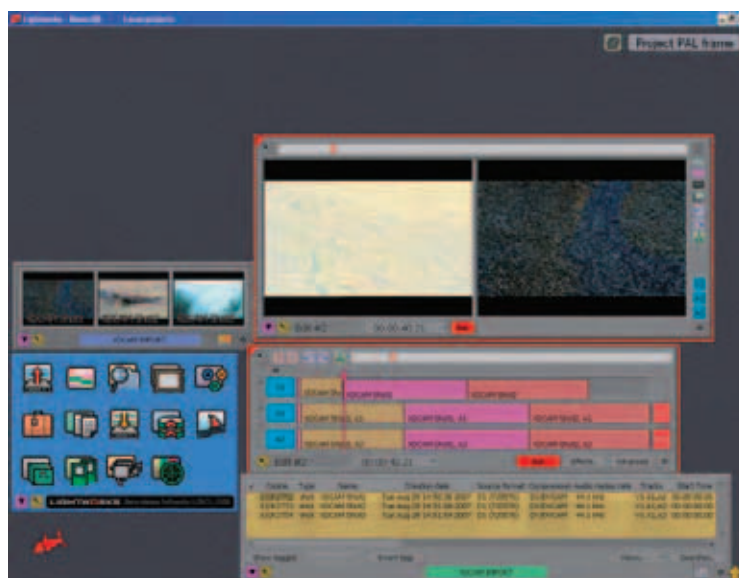
Softworks and Alacrity

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
 DVCAM

Lightworks editors allow for a highly flexible integration with XDCAM solutions and provide a fast efficient editing solution.

1. Import full resolution media and Proxy Data through a 1 GB Ethernet Interface
2. Create Clips by browsing Proxy Data
3. Edit the Media using Softworks or Alacrity and output in a range of formats including QT, AVI, OMF or AAF
4. Export XDCAM media via standard networks, including 1 GB Ethernet, directly to the Lightworks editor for program production.



Contact

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Sony XDCAM HD Workflow with Grass Valley™ Aurora™ Edit and Aurora Ingest with RMI

Aurora Edit is a cost effective, user configurable editing solution that fits where you need it, as a cuts-only or as an effects rich powerhouse editor. Aurora Edit is a format-independent editing application that can be leveraged for both SD and HD editing, with built in transcoding for mixed media formats and aspect ratio conversion. Aurora Edit seamlessly handles any media for any project. Offering direct integration with XDCAM HD, Aurora Edit provides a direct view of high or low resolution content. All XDCAM HD media is protected once it is committed to the Aurora Edit timeline - allowing the XDCAM HD media to be safely removed and re-used. Several bulk ingest options are available, including automated removable ingest (RMI). XDCAM HD files appear in native format within Aurora Edit bins so your workflow is the same as with traditional sources.

Using the XDCAM HD menu, there are two modes of operation:

- AV/C - treat XDCAM HD like a traditional fast linear tape deck - operates only in DV mode - for MPEG media, must use Bin Source mode.
- Bin Source (FAM) mode - XDCAM HD creates MPEG-HD media that is MXF encapsulated and broken into master clip files that can be seen in the bin trimmer / viewer - select DV or MPEG mode.

Note: Requires XDCAM HD firmware version 1.60 or higher

Grass Valley Aurora Edit

Supported File Formats

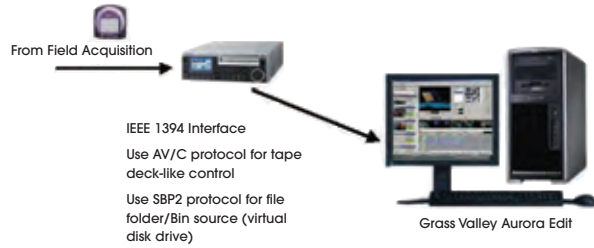
MPEG IMX (50/40/30 Mb/s)
DVCAM
MPEG HD (35/25/18 Mb/s)

Workflow

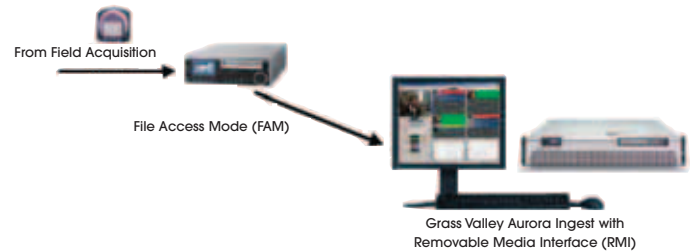
1. Field acquisition of media using an XDCAM HD system. Media can be used directly with any Aurora Edit with FireWire interface. The XDCAM HD device is seen as a disk drive and treated as a bin source in Aurora Edit. This special bin type will show each clip of XDCAM HD media as a Master Clip.
2. Material can be viewed directly off of disk in bin trimmer, media view, and bin source of timeline. In / Out points can be selected and dropped to the timeline, just like any source. Files appear to be in native Aurora Edit bins.
3. Committing the selected media to the timeline will cause media to be protected and imported to shared storage, enabling the XDCAM HD media to be safely removed and re-used.
4. Record to timeline operation is also supported - where XDCAM HD source is pre-rolled and "laid back" to the timeline. Media is still protected with import after the edit.
5. The user has immediate and direct access to high or low resolution media. High resolution media is brought into the system for protection when it is committed to timeline, so removal of XDCAM HD media will not invalidate your sequence. This import is performed during media selection to maximize predictability when sending finished story to air and maintains consistent workflow with other types of source material.



Sony XDCAM HD and Grass Valley Aurora Edit ...just like tape-to-timeline editing.



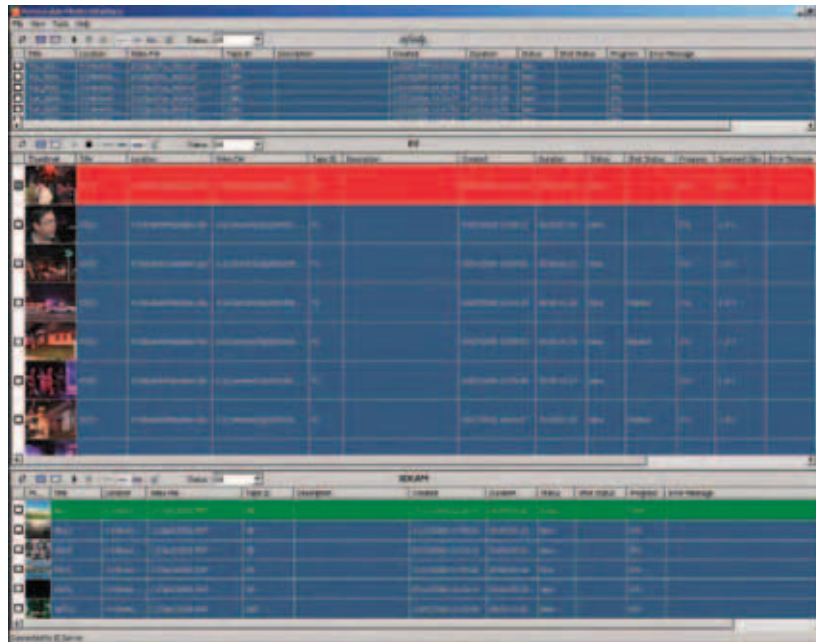
Sony XDCAM HD and Grass Valley Aurora Ingest with RMI



Grass Valley Aurora Edit & Aurora Ingest - RMI From Thomson

Aurora Ingest - RMI

Grass Valley's Aurora Ingest - RMI from Thomson is an application that lets you simultaneously ingest files from multiple removable media devices.



Using Aurora Ingest - RMI

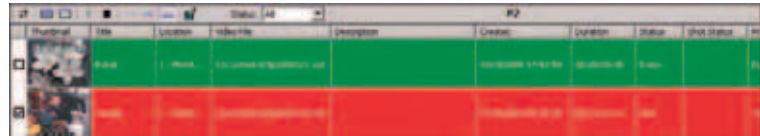
After you have configured Aurora Ingest - RMI and attached the removable media device, RMI is ready to use.

To use RMI, follow these steps:

1. Verify that the removable media device is plugged in and media is attached or inserted.
2. Select Programs | Aurora 6.1 | Aurora Ingest - RMI.
The detachable media option is seen automatically.
3. To select the clips you want to ingest, check the box next to each of the clips.

4. Click the Transfer icon.

While the transfer is proceeding, the clip information has a red background, and the percentage of the transferred media is displayed. Once the clip has been transferred, the clip information has a green background.



Aurora Ingest allows the user - from their point of view or judgment - to "select" good shots and bad shots from within the Aurora Ingest RMI application.



Aurora Edit

Grass Valley's Aurora Edit from Thomson can import and use files from Sony XDCAM Professional Disc media (SD and HD).

When previewing media, XDCAM HD files always use the low-resolution proxy. With SD files, you have the option of using proxies or high-resolution media.

Aurora Edit supports shot status XDCAM. In addition, if a unique title was given to a clip in XDCAM, Aurora Edit will recognize that title and display the modified name.

To import XDCAM files into Aurora Edit:

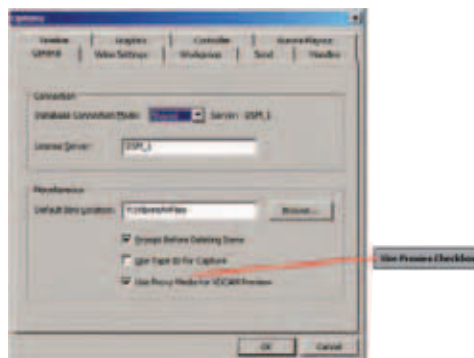
1. Make sure you have the appropriate removable media driver(s) installed on your Aurora Edit. The drivers are located on the Aurora Suite CD-ROM.
2. Insert the XDCAM removable media into the drive.
3. In Aurora Edit, select View | Removable Media Bin.
4. If you want to pre-cache proxies for quicker preview, **click Cache All Proxies**. Otherwise, proxy files are cached when the file is opened. Once cached, status is updated, represented by a yellow triangle in Thumbnail View or listed in the status column in Details View.
5. Import the files into Aurora Edit using one of the following methods:
 - Double-click on a file to open it in the Trimmer, mark In and Out points to select the footage you want, and either create a sub-clip or copy to the Timeline.
 - Drag the clip into the viewing window of the Timeline or Source Tools; the footage becomes a clip source and can be used to mark clips.
 - Drag a clip (or a selection of clips) into the Aurora Edit Bin.
 - To view all clips on the removable media as one long file, **click View as Tape** in the Removable Bin toolbar, scrub the file as needed, and then import.

XDCAM Proxy Editing

Aurora Edit now allows for Proxy Preview, which is the ability to preview XDCAM HD material prior to import. This enhancement enables faster previewing of XDCAM media and supports the 'View as Tape' feature.

Setup

Proxies will always be imported and previewed for XDCAM HD material. For XDCAM material, the user has the option of using proxies or high-res for preview. This is configurable within the General Tab of the Options menu, found within the Tools pull-down menu (Tools/Options/General Tab).



Caching of Proxies

XDCAM clips that are opened prior to import must have their proxies cached (SD only if "use proxy media" is checked). This is done automatically or manually.

Proxies are cached to the *shared* directory. This means that proxy media imported on one Aurora Edit system will be available for editors in other edit bays when that same disc is inserted in those bays. This greatly reduces the time spent on importing proxies.

Once cached, the clip will display a yellow pie shaped icon in the thumbnail view, and the word "cached" will be displayed in the status column of the details view.



View as Tape

With XDCAM proxies now being used, **View as Tape** is an available option for this Removable Media type.

View as Tape takes all of the available clips on an XDCAM or XDCAM HD disc and combines them to form one virtual clip. This combines the benefits of removable media (thumbnails for individual clips, easy access to individual clips, etc.) with the benefits of editing from tape (being able to freely and quickly scrub/shuttle through an entire piece in order to prepare for editing).

Contact

Grass Valley

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XDCAM allows the Velocity NX™ craft editing system to speed up news promo editing by file transferring news footage from an XDCAM camera directly onto a NEXIO™ server rather than through traditional real-time ingest. News footage captured on XDCAM Professional Disc in the field can be passed from camcorder or deck to shared storage via a Gigabit Ethernet connection. Using Gigabit Ethernet allows Harris broadcast equipment to share one XDCAM across many devices using your IT infrastructure. Unlike other vendor's solutions, this does not tie down your XDCAM to one machine, saving you money.

XDCAM files can be accessed by a Velocity NX editor immediately, even while the footage is transferring, allowing the fastest possible turnaround for breaking news. NEXIO server technology makes it possible for all bays to view and edit clips simultaneously without any transfers. This 'true shared storage' allows users to see material coming in from any source (including XDCAM) as it is being transferred or ingested. Within seconds of completing the edit, finished material can be played to air; transferring files in this way can cut the news footage acquisition time in half.

Velocity NX

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
 DVCAM
 MPEG HD (35/25/18 Mb/s)

XDCAM HD/SD clips do not have to be imported right away, they can be browsed and edited in low-res before High Resolution transfer takes place.

1. Choose the XDCAM viewer under the "View" pull-down in the GUI
2. Right click in an empty space
3. Set FTP address of XDCAM you would like to access
4. Choose proxy mode
5. Connect to XDCAM disc and add Proxy clips to the gallery
6. Edit Proxy clips just as you would full resolution clips
7. When edit is finished Hi-Res pieces of the edit will upload from the XDCAM disc
8. When going back to XDCAM disc just choose EXPORT to XDCAM and clip is added back to XDCAM disc

Harris can access XDCAM in Four ways:

1. Gigabit Ethernet FTP file mode where we access the deck as an FTP location
2. IEEE1394 Drive Mode where we mount the drive as a drive letter (exp: F:/)
3. IEEE1394 baseband ingest
4. Baseband SDI/RS422 ingest



Contact

Harris Corporation

Broadcast Communications Division
 NEXIO Servers

Phone 1-818-843-7004

Website www.broadcast.harris.com




IMC Technologies has optimized the XDCAM system workflow for maximum flexibility as well as speed. Users can choose what to download from the XDCAM system, and whether to stay in native MXF format or to rewrap or transcode. We support access to multiple XDCAM system units at the same time and after the initial selection all the work is done in the background so the user can immediately start naming the shots, sub-clipping, and editing either in proxy mode or using hi-res files.

Remote Producer (RP), Media Producer (MP), Newsmaker (N1) and Media Manager (M2).

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
DVCAM
MPEG HD (35/25/18 Mb/s)

Every Incite editing product RP/MP/N1 includes Media Manager (M2) which helps to organize media on disc as well as in projects. M2 is also available as Standalone.

Work in native MXF mode.

1. From M2, use the "Connect to XDCAM" function to download either by Ethernet or by i.LINK (FAM).
2. In the background we will automatically download all the clip metadata, proxy files and then the hi-res files.
3. Optionally, the user can choose to download the proxy files only and decide on the hi-res files later.
4. Clips can immediately be organized in M2, metadata may be added, names changed.
5. As the proxy files become available users can start Logging in M2 and Editing in RP/MP/N1.
6. Once the hi-res files are downloaded, the user can switch M2 or RP/MP/N1 to hi-res mode and all the work done is transparently available in either mode.

Work in AVI/WAV mode.

1. From M2, use the "Connect to XDCAM" function to download either by Ethernet or by i.LINK (FAM).
2. Select a template to rewrap MXF into AVI/WAV.
3. In the background we will download the clip metadata, if proxy files and then hi-res files, and will start converting them.
4. Clips can immediately be organized in M2, metadata may be added, names changed.
5. Converted clips can be used as soon as they are created and they will grow dynamically as the conversion progresses.
6. Like above the proxy/hi-res switch is available.

Use XDCAM material with other NLEs.

1. From M2 Standalone, use the "Connect to XDCAM" function to download either by Ethernet or by i.LINK (FAM).
2. Select either native MXF, a template to rewrap MXF (eg. to AVI/WAV or to QT), or a template to convert to another format (eg. XDCAM IMX to DVCAM in AVI/WAV).
3. In the background we will automatically download all the clip metadata and start downloading the selected files (proxy/hi-res) and convert them as specified in step 2.
4. Converted files are written in read-while-writing mode so they may be accessed at all times and grow dynamically.



Contact

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The above information has been provided by
IMC Technologies.

SONY

The Matrox Axio editing platforms combined with Adobe Premiere Pro provide realtime native editing of OP-1A standard MXF files captured using Sony XDCAM and XDCAM HD devices. DVCAM, MPEG IMX, and MPEG HD are all supported.

Matrox Axio users can transfer native XDCAM and XDCAM HD MXF files into their editing system then mix them with a variety of other native HD and SD media and AVI files on an HD or SD timeline in real time. This smooth workflow and interoperability eliminates inefficient, time-consuming file and codec transcoding and effects rendering. It simplifies integration with various broadcast equipment and eases file management in networked environments by eliminating file recompression to match timeline formats.

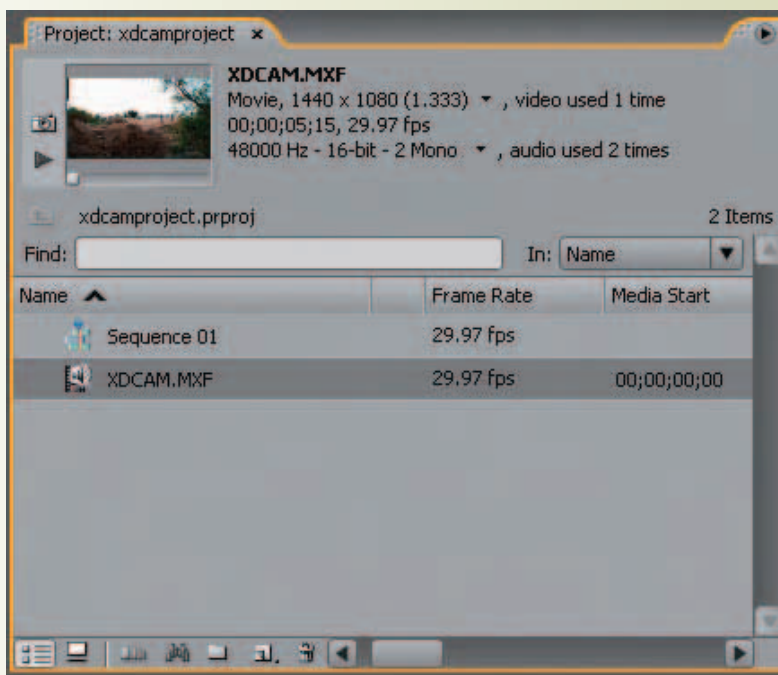
Matrox Axio LE
Matrox Axio HD
Matrox Axio SD

Supported File Formats

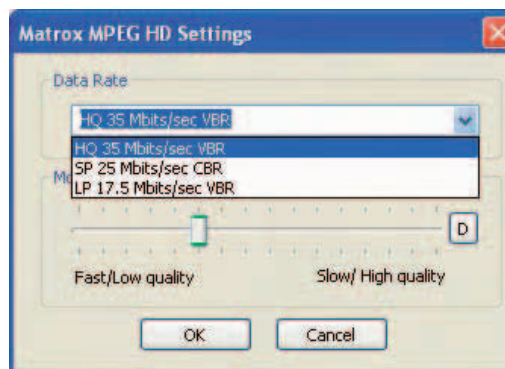
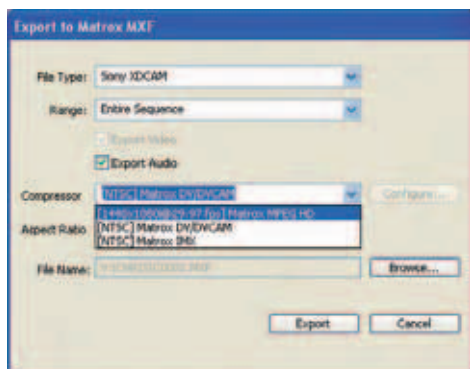
MPEG IMX (50/40/30 Mb/s)
DVCAM
MPEG HD (35/25/18 Mb/s)

Workflow steps:

1. Transfer full-resolution native XDCAM and XDCAM HD MXF files into the Matrox Axio editing system via Ethernet or FireWire.



2. Edit multiple layers of video and graphics using the realtime engine of Matrox Axio; mixing MPEG IMX, DVCAM and MPEG HD material with other native HD and SD media and AVI files as needed on any HD or SD timeline.
3. Apply effects in real time including color correction, chroma/luma keying, speed changes, blur/glow/soft focus, 3D DVE with soft edges and realistic shadows, and many more.
4. Export your HD or SD timeline from within Adobe Premiere to an XDCAM or XDCAM HD compatible MXF file.



5. (Optional) Play out your project from the Axio timeline in realtime directly to XDCAM or XDCAM HD over SDI.



Contact

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Newauto HIMALAYA NLE product line supports connectivity with different types of devices including Sony XDCAM systems. MXF files in an XDCAM system can be imported into the NLE system for native editing without conversion. The edited files can be written back onto an XDCAM disc, and the upload and download can be done via either i.LINK or Ethernet interfaces. The NLE system supports interoperable editing of both high-resolution and low-resolution files.

HIMALAYA X3000, HIMALAYA A1500, HIMALAYA A1200,
HIMALAYA A1000XS, HIMALAYA A1000XH,
HIMALAYA A1000EX, HIMALAYA A1000SP, HIMALAYA A1000,
HIMALAYA MOBILE

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
DVCAM

i.LINK (File Access Mode) / Ethernet

1. Import low-resolution MXF files with designated XDCAM file importing user interface.
2. Edit the low-res files and create the sequence.
3. Import high-resolution material according to the edited sequence with automatic recapture function.
4. Fine-tune the high-resolution sequence.
5. The finished sequence can be written back to an XDCAM system in MXF format.
6. The high-resolution MXF files can also be imported and edited directly to create the final sequence, without low-res editing and recapture.

i.LINK (AV/C)

1. Capture DV material from an XDCAM device via the i.LINK Interface.
2. Edit DV files and create the sequence.
3. The finished sequence can be printed to an XDCAM device via the i.LINK Interface.



Contact

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Sony XDCAM and Quantel Systems deliver the best production workflows today. Users are impressed with the speed and agility of the Quantel XDCAM interface, that allows direct access to the essence and metadata. This, combined with the easy to use, progressive Quantel editing interface has resulted in much faster operational workflows.

With the launch of Sony XDCAM HD, Quantel continues its tradition of working closely with the leading edge companies such as Sony.

Quantel products compatible with the Sony XDCAM family include: sQ Cut, sQ Edit, sQ Edit Plus, Paintbox, eQ, iQ, Newsbox, sQ, Picturebox sQ, all of the above working in standard definition, high definition, or if required, both.

sQ Cut, sQ Edit, sQ Edit Plus
sQ, Newsbox
Paintbox
eQ, iQ

Supported File Formats

MPEG IMX (50/40/30 Mb/s)
MPEG HD under development

sQ editing series workflow - using network connection:

1. XDCAM Proxy Clips are imported to the sQ edit seat through the network connection.
2. Select segments of the Proxy using functions with the Quantel applications.
3. After the Proxy selection, high-resolution files are imported using the "automated import" function. This can be to the edit seat, the sQ/Newsbox, or both.
4. Content is available immediately to all users connected to the sQ or Newsbox server system, not just the edit seat that selected the content.

sQ editing series workflow - using i.LINK (File Access Mode) interface.

1. Proxy Clips on the XDCAM disc are viewed directly using the i.LINK connection.
2. Selection of multiple clips or files is made within the Quantel application.
3. Full resolution content is transferred at max possible speed into the editing seat, and/or the connected sQ/Newsbox servers.
4. Content is available immediately to all users connected to the sQ or Newsbox server system, not just the edit seat that selected the content.

Paintbox, eQ, iQ and non-server connected operation of sQ Edit, sQ Edit Plus.

1. Proxy Clips imported to the edit seat through the network connection.
2. Select segments of the Proxy Data using editing functions with the Quantel applications.
3. Import the high-resolution files using the "automated import" function, direct to the local storage of the device.
4. Content is now available to be edited alongside any other material already within these systems.

Paintbox, eQ, iQ, sQ Edit, sQ Edit Plus using i.LINK (File Access Mode) interface.

1. Proxy Clips on the XDCAM disc are viewed directly using the i.LINK connection.
2. Selection of multiple clips or files is made.
3. Full resolution content is transferred at max possible speed into the editing seat.
4. Content is now available to be edited alongside any other material already within these systems.

The screenshot displays the XDCAM software interface. At the top, a table lists several clips with the following columns: title, dur, Sports TC, date, time, serial, description, and vs. A. The table contains 9 rows of clip data, with the 5th row (C0005) highlighted in red. Below the table is a menu bar with 'Search', 'Browse', 'Preview', and 'Setup'. In the center, a video preview window shows a scene with two people, and below it is a playback control bar with buttons for Start, Stop, Play, and End, along with 'In', 'FFwd', 'Sfwd', 'SFwd', and 'FFwd' options. At the bottom, there is a status bar with 'HWTest', 'Quality', 'Cin', and 'clip [00:00:00] XDCAM'.

title	dur	Sports TC	date	time	serial	description	vs. A
C0001	9:17	7:49:47:00	04/03/2004	17:38:13	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0002	6:23	16:02:48:00	04/03/2004	17:38:27	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0003	10:20	1:13:48:00	04/03/2004	17:38:37	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0004	9:00	2:27:48:00	04/03/2004	17:38:51	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0005	10:07	9:39:48:00	04/03/2004	17:39:05	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0006	5:21	17:53:48:00	04/03/2004	17:39:18	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0007	9:12	6:03:49:00	04/03/2004	17:39:27	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0008	5:18	11:16:49:00	04/03/2004	17:39:40	0043130000K	SONY, PDW-1500, S/N - 03177	va8
C0009	9:03	23:25:49:00	04/03/2004	17:39:50	0043130000K	SONY, PDW-1500, S/N - 03177	va8

Contact

Quantel

Phone +44 (0) 1635 48222

Website www.quantel.com/products




Sony XDCAM + Sobey EditMax system; an integrated program editing workflow based on XDCAM non-linear medium. It can reduce editing time and cost, while realizing improved editing efficiency.

After on-site shooting, the editor can edit Proxy AV data using Sobey Mobile Station in the field. When the Proxy Editing is complete, the Sobey system can ingest only necessary parts of high-resolution material which were selected in the proxy timeline. The editor can take the high-resolution timeline to studio and on air, or render the timeline to stream file such as WMV to transfer by network for the emergency news.

i.LINK (File Access Mode) / Ethernet

1. Direct access the disc to preview clips and mark IN/OUT in Disc Manager Window
2. Background import proxy file AND/OR high-resolution (whole & IN/OUT partial) clip
3. Editing while importing (proxy/high-resolution in MXF format)
4. Saved EDL/Sequence in XML format to disc
5. Write back final sequence to disc in MXF format while rendering
6. Support XDCAM/XDCAM HD workflows

Editmax 2000

A mobile nonlinear editor

Supported File Formats

MPEG IMX (50/40/30 Mb/s)

DVCAM

MPEG HD (50/35/25/18 Mb/s)

EditMax 2000 mobile nonlinear editing system is based on the front cell of Nonlinear Workflow network of Sony Professional Disc media technology, and it provides the following functions: low resolution clips uploading at high speed, highly efficient low resolution editing in the field, transmission of EDL, clip copy and remote transmission, which provide the powerful latest Nonlinear Workflow network.

Function Description

- Adopting high and powerful functions laptop, supporting real time and multi-layer time-line, multi-layer dynamic CG, even supporting the real time 3D special effects.
- Supporting multi-rate editing at the same time.
- Supporting i.LINK and Ethernet interfaces, and supporting AV data uploading at high speed based on SBP2.
- Support XDCAM/XDCAM HD technology perfectly.
- Support FTP, WLAN, cut transmission, and provides the fastest clip transmission.
- Supporting real time 2D and 3D effects and the third party effects plug-in.



Editmax2000

Editmax 7

Sobey's new generation desktop system

Supported File Formats

MPEG IMX (50/40/30 Mb/s)

DVCAM

MPEG HD (50/35/25/18 Mb/s)

Editmax7 (E7) is a high performance NLE editing engine; it uses Windows desktop style, provides multiplicate operation modes, and supports flexible system transmutation. This workflow, not only edits conveniently, but also provides powerful functions at the same time. E7 makes use of open structure and CPU+GPU as the kernel; E7 cooperation with Sony XDCAM HD. And it can easily support future system development.

Function Description

- Open Structure Based on CPU+GPU
- Desktop Style, Multiplicate Operation Modes
- Easy, Stable, Efficient HD/SD Mix-editing
- High quality HD CG system and real-time GPU effects
- Flexible Product Transmutation
- Skin and modularization design



Editmax 1

The direction of NLE technology in the future

Supported File Formats

MPEG IMX (50/40/30 Mb/s)

DVCAM

Editmax1 non-linear editing system is based on CPU+GPU technology and high performance workstation. It adopts advanced "CPU+GPU+IO" system architecture to instead of traditional professional board; Editmax 1 in cooperation with Sony XDCAM systems, can provide more powerful and efficient functions for the editing workflow.

Function Description

- Broadcast level real-time SD program output
- Supply real-time multi-format editing, including uncompressed, MPEG2 I frame, MPEG2 IBP, IMX, DV, WMV, etc.
- Abundant and gorgeous real-time GPU effects
- High efficiency render engine to realize high speed program render
- Supports Sony XDCAM technology
- High system stability



Contact

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The above information has been provided by Sobey.



Vegas®

Only Vegas Pro 8 software combines real-time DV, SD, and HD video editing with unrivaled audio tools to provide the ultimate all-in-one environment for creative professionals. With its unique, visual approach to digital video and audio production, Vegas software delivers tremendous power, incredible speed, and maximum productivity in an uncomplicated, efficient platform.

Vegas Pro 8 software provides all the tools needed to edit proxy and full resolution HD and SD XDCAM MXF files natively, no transcoding required. Vegas Pro 8 supports all HD and SD XDCAM compression types (MPEG HD, IMX 30,40,50, DVCAM), all framerates, all aspect ratios, multichannel audio, and essence marks. All proxy and full resolution XDCAM source file types can be mixed in a single timeline, edited, and transferred back to the XDCAM system via i.LINK, Network FTP or SDI.

XDCAM System Specific Features Include:

- File access mode (FAM)
- i.LINK transfer
- Ethernet transfer
- XDCAM Explorer pane
- Essence marks support (all types)
- Proxy editing
- Master to disc (all formats)
- SD Import (all modes supported, native .MXF editing)
- HD Import (all modes supported, native .MXF editing)
- Multichannel audio read (all supported channel configurations, full/proxy resolution)
- PDZ list import, with proxy/full resolution conform capabilities
- Conform proxy timeline to full resolution (with file trimming if supported by deck)
- Conform all selected proxy media in Vegas database to full resolution
- SD Render (all modes supported by format)
- HD render (all modes supported by format)
- Multichannel audio write (all supported channel configurations)
- Smart rendering support for all full resolution XDCAM formats

Vegas Pro 8 software

Supported MXF File Formats

MPEG HD (35/25/18 Mb/s)
MPEG IMX (50/40/30 Mb/s)
DVCAM

Editing workflow:

1. Browse proxy files via Vegas XDCAM integrated browser
2. Add proxy/full MXF file directly to Vegas timeline for editing (or open proxy/full MXF source file in Vegas trimmer, use essence marks to quickly locate flagged moments)
3. Program masters can be output to XDCAM disc via i.LINK, Network transfer, or SDI



Contact

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The above information has been provided by Sony Creative Software.



Video Technics provides the highest level of interoperability with Sony XDCAM systems using plug-in technology embedded in Adobe® Premiere Pro v2.0 and the VT Proxy Editor™ low-resolution editor. The VT XDCAM Browser connects via Ethernet directly to any XDCAM device on the network and allows the user to seamlessly browse the centralized database and sort media by ID, date, duration, and thumbnail picture. Files are copied as native MXF or automatically re-wrapped in an AVI format without transcoding, which preserves the original file quality.

XDCAM media is dragged and dropped directly into the Adobe Project Bin and transferred much faster than real-time. Files are optionally imported to a non-proprietary SAN/NAS storage system along with associated metadata and proxies for shared access by any VT browse/edit client or craft editor, and are immediately available for playout on any HD/SD Apella™ video server channel. Managing collaborative broadcast media content has never been so fast and easy!

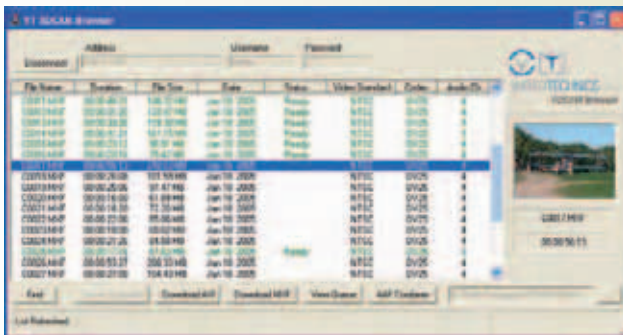
Apella Media Server Family VT Proxy Editor Adobe Premiere Pro – VT XDCAM Plug-In

Supported File Formats:

- MPEG IMX (50/40/30 Mb/s)
(w/Matrox Axio)
- DVCAM
- MPEG HD (35/25/18 Mb/s)
(w/Matrox Axio)

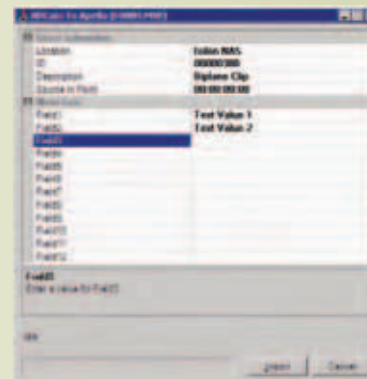
Apella, VT Proxy Editor, Newsflow™

1. Launch the VT XDCAM application



2. Select the XDCAM device from the drop down list or enter a new IP address.
3. Once connected, the browser will display a list of clip IDs, metadata, and thumbnails on the XDCAM media.
4. Select MXF or AVI format.

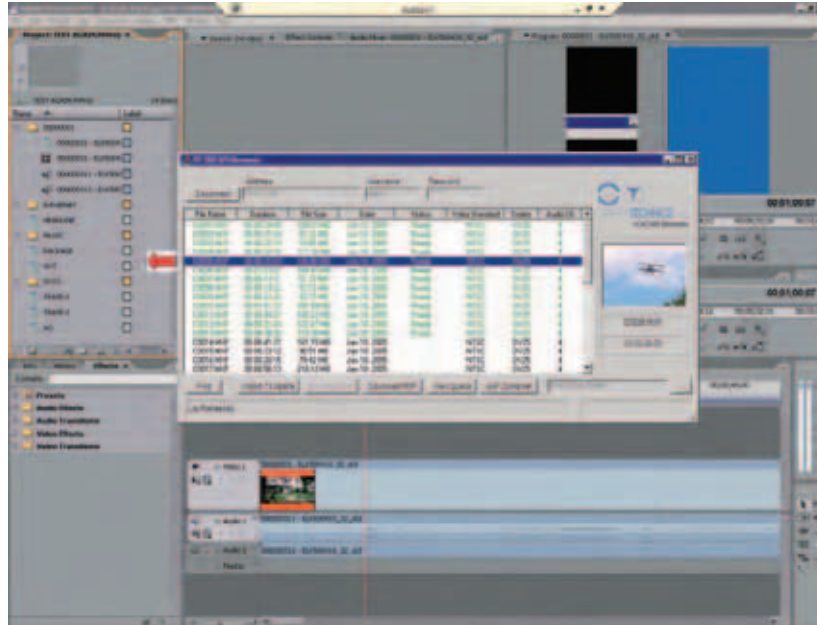
5. Select one or more clips in the display and click Import to Apella.
6. Log on with your username and password.
7. Add a description for the clip and metadata in the dialog below and click Import.



8. Media is transferred from the XDCAM system to the centralized media storage.

VT XDCAM Browser Plug-In for Adobe® Premiere®

1. In Adobe Premiere Pro, select *File > New > VT XDCAM Browser*
2. Select the XDCAM device from the drop down list or enter a new IP address.
3. Once connected, the browser will display a list of clip IDs, metadata, and thumbnails on the XDCAM media.



4. Select one or more clips in the display and drag into the Adobe Premiere Pro project bin.
5. Optionally, you can select multiple clips and import as a single AAF timeline by clicking **AAF Combiner**.
6. Media is re-wrapped as AVI and then transferred to the current Adobe Project folder.



Contact

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SONY[®]

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V-2331-A (MK10053V2)

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