[NEXIO] EDITING SYSTEMS



Leitch Technology is a 32-year global leader in the design and distribution of high-performance video systems for the professional television industry. Leitch offers the most extensible products and interoperable systems, enabling operations of any size to achieve a truly Integrated Content Environment. Leitch is the most trusted name for increasing performance and productivity through solutions that streamline workflow of content production, processing, transmission and management. With a sole focus on and commitment to the television industry, Leitch provides unparalleled customer support.

 Canada
 +1 (800) 387 0233

 USA East
 +1 (800) 231 9673

 USA West
 +1 (888) 843 7004

 Latin America and Caribbean
 +1 (305) 512 0045

 Europe
 +44 (0) 1344 446000

 France
 +33 (1) 42 87 09 09

 Italy
 +39 02 3655 3450

 Hong Kong
 +852 2776 0628

 China
 +86 10 6801 3663

 Japan
 +81 (3) 5423 3631

Additional brochures in the NEXIO series: NEXIO Server System, NEXIO NewsNet, NEXIO Transmission, Ingest Control Manager and NEXIO MediaNet.

Please visit www.leitch.com/nexio for more information.



NEXIO, Editing Systems



Enabling Your ntegrated Content Environment

www.leitch.com

 $\left[\mathsf{NEXIO}\right]$ editing systems

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The Industry's Fastest Ingest-to-Air Editing System

The NEXIO video server is the ideal platform for in-server editing — blending high-performance storage and instant access to content. NewsFlash is the ideal editor for speed. With all seats attached directly to NEXIO shared storage, content is available the moment ingest begins.

Speed

NewsFlash is synonymous with speed and performance. This superb application contains all of the standard features you would expect in a non-linear editor with one important difference — NewsFlash uses the NEXIO server for shared storage and immediate access to content. With NewsFlash and NEXIO at your fingertips, your station has all the tools needed to be first-to-air with news content.

As part of NewsNet™, Leitch's digital newsroom solution, NewsFlash dramatically reduces editing time by eliminating the need to copy material, render stories or create air tapes. As soon as ingest begins, editing can begin — on multiple seats sharing the same content. No transfers. No waiting.

To further increase speed, finished programs can be played to air the moment the last clip is placed on the timeline. No ejecting tapes. No running to playout stations.

Instant Access

The news story is shot — the crew returns from the field. The moment that ingesting begins on NewsFlash or through a NEXIO server ingest port, all editors have simultaneous, instant access to the clips in shared storage. Editing can begin immediately. With 4x ingest capability, an entire 30-minute camera tape can be accessed by all editors (and all playout channels) in less than eight minutes. Instant access to digitized material is also available through FireWire. And because multiple NewsFlash seats have access to

shared storage, a complete news package can be edited simultaneously (including headlines, teases and promos), even while content is being ingested.

Instant Playback

Once a story is complete, it is instantly available to all playout channels. Acquisition and playback can be controlled using the supplied interfaces or via third-party automation. And throughout the entire production process, you can seamlessly link to your choice of Newsroom Computer Systems (including ENPS®, OpenMedia® or iNEWS®) with Leitch's own interactive play-to-air tools to sequence stories for broadcast.

Intuitive Tools

NewsFlash offers an intuitive, easy-to-learn platform. All the standard tools are available for fast, precise cutting — including trimming, stretching, replacing, inserting and much more. A wealth of advanced features are also a click away — including Record to Timeline, a completely user-definable interface, sync lock and storyboard editing. For today's fast-paced newsrooms, NewsFlash is the clear choice over the competition.

Format Independence

NewsFlash capabilities are constantly advancing, directly in step with the evolving demands of modern news production. Underscoring NEXIO's foundation principle of format independence, NewsFlash edits DV25, DV50 and MPEG 2 with transitions

and effects all on the same timeline. New additions such as IMX and MXF also combine to give your editing staff a significant performance advantage.

Plug-in Support

NewsFlash includes a comprehensive toolbox of onboard effects such as Picture-in-Picture, Blurs, Mosaics and Chroma Key. However, when extra functionality is required, NewsFlash integrates with a wide range of third-party plug-ins. From third-party text generation applications to entire compositing and animation engines, NewsFlash is totally compatible with the tools of your choice.

MediaNet[™] Integration

NewsFlash is fully integrated with MediaNet, Leitch's all-encompassing broadcast content management system. With MediaNet, NewsFlash users have unlimited access to content in both local and distant NEXIO domains. Whether material is available in an archive or geographically dispersed among many different broadcast stations, MediaNet enables transparent and swift access to content.

Third-Party Support and Remote Editing

NewsFlash has been specially designed to support many of the formats exported by the latest laptop remote editors. As soon as a remotely edited program has been transferred to NEXIO or imported through NewsFlash, it can be played to air or enhanced using NewsFlash.



NewsFlash



BrowseCutter



VelocityQ

NX4465ES — NewsFlash DV25, MPEG (4-50) based non-linear editing system

- Includes NewsFlash Editing Software with Windows® XP® OS. Includes Server Chassis with external Digital/Analog I/O Breakout Box
- Includes single VGA monitor support and single 100 Base-T Network Interface Port
- Does not include EC400, EC404 or EC408 External Edit Controller, Disk Storage or VGA monitor(s)

NX4475ES — NewsFlash FX, supports 10 video and graphic (alpha) tracks per timeline (total of 10 layers)

- Provides DV50 plus full 2-D DVE, Third-Party Plug-in capability and bundled CG
- Adds support for digital flat panel displays through DVI connector
- Does not include EC400, EC404or EC408 External Edit Controller, Disk Storage or VGA monitor(s)

NX465UPG — Full upgrade, NX4465ES NewsFlash to NX4475ES NewsFlash FX

- Includes hardware and software to enable all features and capabilities of NX4475ES NewsFlash FX
- Provides DV50, as well as full DVE, Third-Party Plug-in capability and bundled CG package (NX4465PKG1)
- Adds support for digital flat panel displays through DVI connector

NX465PKG1 — Advanced Effects package

- Includes hardware/software support for Third-Party Plug-ins (Plug-ins not included)
- Adds full functionality of 2D DVE with Chroma, Luma, Matte and Alpha channel keying
- Includes Software CG and 6 additional video/effects compositing tracks

EC400 — No Fader JL Cooper. Programmable with function key mapping

EC404 — 4 Fader JL Cooper. Programmable, function key mapping, Fader track assignments

EC408 — 8 Fader JL Cooper. Programmable, function key mapping, Fader track assignments

BrowseCutter Server

■BC2S — Stores MPEG-1 clips and maintains low-resolution clip database

BrowseCutter 1 Channel Encoder

- ■BC2E 1 channel MPEG-1 Encoder in a 1RU frame
- ■BC2E2 2 channel MPEG-1 Encoder in a 1RU frame

BrowseCutter Edit Clients

- ■BC2C1 BrowseCutter edit client, 1 user license pack
- ■BC2C5 BrowseCutter edit client, 5 user license pack
- BC2C10 BrowseCutter edit client, 10 user license pack
- BC2C25 BrowseCutter edit client, 25 user license pack

Boardset and Software Bundles for installation into a Windows 2000® or XP Workstation

=Q3D-5410DX — VelocityQ Advanced Multi-Layer Non-Linear Editor with Q3DX4 Quad-Channel Realtime 3D DVE Module and Professional AV Breakout Box

VelocityQ Turnkey NLE Systems — North American models listed. For configurations in other regions, contact your Leitch representative. All systems listed below include VelocityQ Dual Xeon Deluxe Mid Tower NLE:

- **Q3D-5410TX-0** without Video Storage
- $extbf{=}$ Q3D-5410TX-146 w/ 146GB (2 x 73GB) 10,000 RPM External Video Storage
- **Q3D-5410TX-292** w/ 292GB (2 x 146GB) 10,000 RPM External Video Storage
- ■Q3D-5410TX-584 w/ 584GB (4 x 146GB) 10,000 RPM External Video Storage
- **Q3D-5410TX-1168** w/ 1168GB (8 x 146GB) 10,000 RPM External Video Storage
- \blacksquare Q3D-5410TX-146U w/ 146GB (2 x 73GB) 15,000 RPM External Video Storage
- **Q3D-5410TX-292U** w/ 292GB (4 x 73GB) 15,000 RPM External Video Storage
- $extbf{=}$ Q3D-5410TX-584U w/ 584GB (8 x 73GB) 15,000 RPM External Video Storage

VelocityQ Options

- SDI-5020 SDI and Digital Audio Input/Output Module (1 SDI input, 2 SDI outputs)
- ■148-800200-01 VelocityQ Color-Coded Custom Keyboard
- JOG-5000 External Hardware Jog/Shuttle Controller
- FAD-5000 Motorized External Audio Fader Controller
- ■VQ-SRVR-INTR Server Interchange Module



NewsFlash Features



The Industry's Fastest Non-linear Editing and Finishing System

With VelocityQ, Leitch integrates the speed of multi-stream non-linear editing with the power of NEXIO's shared storage environment. VelocityQ is the ideal tool for cutting promos, interstitials, bumpers, animations, graphics and other complex layered projects.

Power, Speed and Creativity

With extensive realtime layering, dynamic 3D effects, multi-stream flexibility and comprehensive output capability for broadcast, DVD and the Web, VelocityQ delivers fast, dependable performance. With an advanced high-end toolbox, complex layered projects can be produced with exceptional speed and precision.

Underscoring NEXIO's concept of collaborative production, VelocityQ can edit with local content or use content from the NEXIO shared storage server. Users can browse the servers' database directly from VelocityQ's user interface, select clips as required and transfer them to VelocityQ for multi-layer post and finishing. Completed projects can be exported back to the NEXIO server with equal ease.

Realtime Streams, Layers, Effects and Keys

VelocityQ offers editors a graphics powerhouse, with the ability to layer four video streams (both compressed or uncompressed) and up to six multi-effect graphics streams — in realtime. For maximum creative flexibility, additional realtime effects such as variable speed changes, reverse motion, color correction, "garbage mattes" and keys can be combined simultaneously with transitions, rolls and crawls. Up to four 3D effects such as rotation, perspective and warp can be applied to graphics — in realtime. And for added creativity with animated logos, 32bit motion video files (with alpha channel) can be keyed over transitions — in realtime. The bottom line — if you can imagine it, VelocityQ can create it.



Interoperability

With VelocityQ, collaborating with other editing and graphics systems is easy and seamless. Features such as EDL import and export, plus optional OMF and AAF support make it easy for editors to exchange projects and files with other systems. In addition, Leitch's flexible Virtual Tape File SystemTM provides transparent file interchange with graphics, animation and compositing systems.

Third-Party Support

Leitch recognizes that multiple solutions are available to broadcasters from multiple manufacturers. To that end, Leitch provides the tools for third-party editing systems to connect to the NEXIO server.

These tools extend to new laptop-based "Remote" systems specifically designed for field editing. For compatibility, any system that generates an EDL in a compatible file format can work with NEXIO.



Transfer methods are accurate and reliable. Projects can be transferred via high-speed data links directly to NEXIO, the output can be transferred via Ethernet, or FTP can be used to transfer to a NEXIO gateway (such as the NX2000GS IP Gateway Server). Locally, where the NEXIO connection is via Ethernet or FTP, transfers occur faster than realtime. As with all NEXIO content, once files are transferred, they are available to all NEXIO ports as well as NewsFlash, BrowseCutter and Rundown Manager.

Overview

- •Instant access to all source material as soon as ingest begins
- Edit material while recording
- Easy-to-use drag and drop interface
- Full integration with the NEXIO server via Fibre Channel no transfers required, ever
- Timesaving, streamlined operation
- Instant playback of finished stories directly to air from shared storage
- Single centralized storage supports over 100 channels in a single domain



Editing Toolset

- =25 levels of undo / redo
- Cut and paste timeline editing
- Display all library bins in both visual and text modes
- User-definable timeline display for showing clips, scenes, takes, tapes and thumbnails
- Sync lock for maintaining perfect synchronization between audio and video tracks
- Storyboard editing to timeline
- Multiple, user-definable clip lists
- Match frame / recall feature
- Project sharing among all NewsFlash systems for a true collaborative work environment
- Import and export EDLs via TCP/IP or floppy disk providing seamless integration with BrowseCutter and industry-standard browse editors

Video

- Standard Digital, Component or Composite inputs
- Over 100 realtime video transitions (dissolves, wipes)
- Slow-motion / speed-up / freeze frame effects with fit-to-fill
- Digitize directly to the timeline from VTR
- Ingest via IEEE 1394 (FireWire)
- (NX4475ES systems only) Built-in Inscriber Character Generator for realtime graphic keying over video

Audio

- Four channels in / six channels out
- Standard Analog, AES or digital inputs
- ■Up to eight timeline tracks all with meters, waveforms and realtime linear audio scrubbing
- Realtime audio fades, cross fades, routing and mixing
- Ability to digitize live voice-over directly to the timeline

BrowseCutter Features



The Industry's Fastest Browse and Proxy Editing System

BrowseCutter is a low-resolution browse and proxy editing system designed for today's advanced Newsroom Computer Systems. BrowseCutter uses MPEG-1 "proxy" clips created at the point of ingest from high-resolution material. Through tight integration with NEXIO and by eliminating costly editing hardware, BrowseCutter dramatically increases newsroom efficiency.

Immediate Content — Maximum Capability

BrowseCutter is the industry's premier choice for newsroom proxy editing. With an intuitive timeline, voiceover capabilities and integrated conforming, BrowseCutter maximizes workflow — right from the desktop or inside the Newsroom Computer System's UI. No automation layer or other hardware is needed to connect the NEXIO server to multiple BrowseCutter seats, where all low-resolution "proxy" clips are constantly available.

Streamlined Components

The BrowseCutter system comprises three key components: one or more BrowseCutter encoders, the client application and a network server.

- The BrowseCutter encoder creates low-resolution MPEG-1 clips for storage on the BrowseCutter server. Encoding triggers are received directly from NEXIO.
- The BrowseCutter application is an ActiveX control and is designed to run inside a newsroom computer system. The user interface includes windows for previewing, searching, clip playback and timeline editing.
- The BrowseCutter network server stores MPEG-1 content plus final projects. In addition to providing centralized storage, the server's speed and capacity enable easy searching through large numbers of clips. The server also passes completed EDLs to NEXIO InstantOnline™ for conforming and transmission.

Multi-use Functionality and Full Integration

In addition to editing, BrowseCutter also serves as a simple and effective clip browser, clip logger and archive search engine. In any application where locating and viewing clips is required, BrowseCutter outpaces the competition in sheer speed.

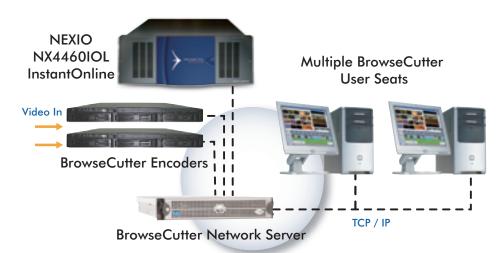
From a system standpoint, BrowseCutter is fully integrated with the NEXIO server, in which all content is accessible to all domain users. BrowseCutter users are able to share projects with other BrowseCutter users and high-resolution editing systems. In this way, versioning and editorial reviews can occur quickly and efficiently.

Like other NEXIO products, BrowseCutter's cost-effective and modular design allows users to pick the specific functionality and quantities desired to suit budgets and working environments. With the addition of MOS compatibility, BrowseCutter's integration with Newsroom Computer

Systems is complete. BrowseCutter can be configured so that the MOS tags it inserts into scripts can be used by Leitch's own MOS playout application, Rundown ManagerTM — or by similar third-party play-to-air applications.

Leveraged Functionality

As a value-added enhancement and underscoring NEXIO's open architecture, Leitch provides the API (Applications Programmer's Interface) that enables applications partners to develop custom tools. BrowseCutter's tight integration with third-party automation vendors allows users to leverage the additional functionality of newsroom automation systems. Because proxy clips are created automatically at the point of ingest, automation systems do not have to control this process. They can focus accessing, managing and synchronizing low and high-resolution content. The bottom line — BrowseCutter provides a new level of power, flexibility and speed to low-resolution proxy editing



Overview

- Uses standard desktop PCs and IT infrastructure
- Frame-accurate browsing, editing and conforming
- All content is stored on a central BrowseCutter server, including low-resolution clips, projects and voiceovers
- Variable bitrate encoding 150Kbps to 1.5Mbps
 MPEG-1 video files
- Project sharing between all BrowseCutter users for true collaborative workflows
- BrowseCutter EDLs (including voiceover) are available to NewsFlash
- Automatic low-resolution proxy clip encoding when material is ingested via NEXIO
- Manual and automatic proxy encoding when content is generated by NewsFlash, imported from archive or ingested via Ethernet
- High and low-resolution database synchronization with userdefinable rules



BROWSECUTTER.

Browsing Toolset

- Simultaneous playback of multiple clips
- Video scrubbing
- Dynamic playback speed control, including audio
- Clip and project search functions
- Browsing of projects created by all users, even if project is in use

Editing Toolset

- Cuts-only editing
- Drag-and-drop functionality with timeline cut-and-paste
- Independent video and audio track editing
- Up to 99 levels of undo and redo
- Voiceover recording at the desktop with simultaneous video playback
- Natural sound source audio is preserved when a voiceover is present
- Direct timeline editing change edit points directly on the timeline
- Timeline and source video scrubbing
- Share projects with other network users
- Conform a clip with a single click

Conforming

- Direct EDL export from the BrowseCutter network server to InstantOnline
- EDLs conform faster than real time
- Instant playback of conformed clip the moment that it begins being written to disk

Integration

- BrowseCutter runs inside the newsroom client interface
- User interface resizes to fit in the host application window
- MOS-compliant insert MOS tags from BrowseCutter projects directly in scripts