

DigitalFilmTechnology

# FLEXXITY™ Archive

Specialized Software for Image & Audio Post Production



# FLEXXITY Archive

## File and Video Conversion & Mastering for Archive & Restoration

FLEXXITY Archive is a transcoding, conversion and mastering application in the new FLEXXITY specialized software suite from Digital Film Technology GmbH. It has been designed specifically for Archive & Restoration applications.

### Specifically for Archive & Restoration

FLEXXITY Archive accesses archive footage from disk storage or ingests material from film and audio scanners and converts this footage into file, video, and media formats for archival storage and reproduction.

### Create Many File and Video Outputs

DPX files store a great amount of color information and allow for a wide variety of metadata to be stored within each file. Digital archive assets are typically stored as DPX files. However, the DPX files may not be the preferred delivery file type for an online version or a browsing copy. Depending on the archive, a variety of content delivery formats may be required; from SD/HD video to Windows Media, QuickTime, MXF, AVI, Broadcast WAVE and MPEG file formats. FLEXXITY Archive provides a unique software toolset that allows users to quality check scanned or ingested material in real-time and to create an array of different file and video output formats.

### Functional Toolset

FLEXXITY Archive has built-in real-time image processing capabilities for color correction, 1D and 3D LUTs, cropping and scaling. It also features dust busting tools such as semi-automatic dirt & scratch removal, and retouching.

Users can quickly edit or online conform a timeline in full resolution, perform a very fast “on the spot” sound synchronization, which includes operations like “fit and fill resampling” as well as generate and output digital files and real-time SD/HD video.

### Background Rendering

The complete FLEXXITY suite of software applications provides concurrent background rendering of file outputs while the creative work continues. The background rendering architecture for file outputs automatically distributes the rendering to all available nodes in a cluster, which makes optimum use of all available CPU and GPU resources. This helps facilities maximize workflow efficiencies across their post production applications.

### Integrates Scanning and Footage Delivery Tasks

A common database for all available metadata information is shared with the SCANITY. FLEXXITY Archive also seamlessly integrates with other FLEXXITY applications on a network including FLEXXITY Playout and FLEXXITY Dailies.

### Template Driven & User-Friendly

FLEXXITY is a Linux-based software platform that has been designed to utilize templates. This template-driven process speeds up the creative and functional operations and helps reduce user errors, a key criteria for archives.

FLEXXITY Archive features a user-friendly GUI for online editing and EDL online conforming, image and audio synchronization, real-time video playout of up to three parallel output channels and parallel rendering to a large variety of file and video outputs.

### Storage and Control Panels

FLEXXITY Archive runs on local storage, NAS (Network Attached Storage) or SAN (Storage Area Network) configurations. It can be controlled via Tangent Devices CP200 or WAVE control panels.

### Options

Options can be purchased at any time via a software license. Options include image and audio capture and conversion, secondary color correction, real-time grain reduction & contour enhancement.



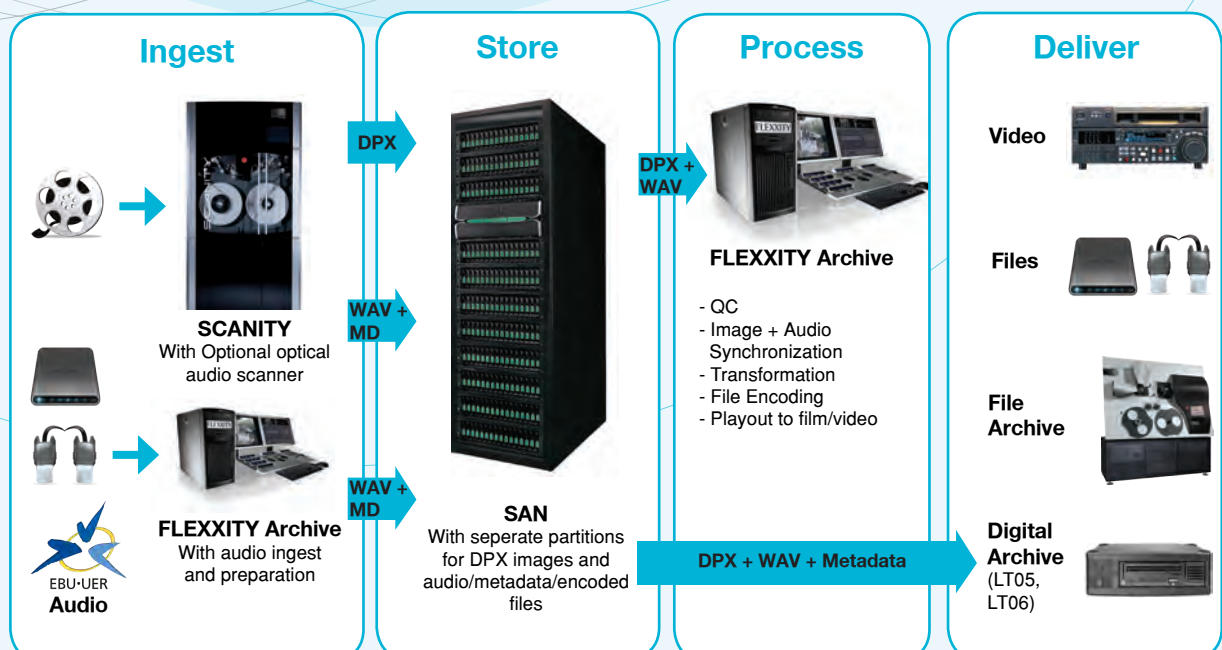
**FLEXITY Archive – Integrated Image Processing – color correction, 1D or 3D LUTs, image transformation, optional grain reduction and contour enhancement and dust busting (dirt, scratch, retouching)**



**FLEXITY Archive – Output GUI for template based file and video media generation**

# Key Features

- Fast and easy to use software tool that natively takes DPX, QuickTime and digital cinematography raw formats like ARRIRAW or Red R3D and converts them to various video and file output formats
- Perfect integration with DFT SCANITY - shared production database for metadata information such as projects, clips, audio/image associations, markers and shared background rendering
- Quality check of the material in real-time
- Built-in monitoring and image analysis tools (waveform, vector scopes, detail tool)
- On-line timeline editing and easy and fast audio / video synchronization including marker based fit and fill audio resampling
- On-line EDL conforming (including real-time dissolves, wipes and varispeed effects)
- Real-time GPU accelerated 2K to HD down conversion or HD to SD down conversion including 2:3 pull-down generation
- Up to 3 parallel video output channels for playout of different versions (graded, raw, HD, SD, burn-ins, clean etc.); max. 2 video outputs can be accomplished with one video I/O card
- Direct, parallel and fast render output for Quick Time, MXF, DNxHD codec, MPEG1, 2, 4, chaptered DVD, WM, AVI and many others
- Real-time character generator for burned in metadata such as TC, KC, logos and bitmap
- Resolution independent
- Template-driven file and video capture and output generation - speeds up operation and reduces errors
- Integrated background rendering for file output generation, transcoding and scene change detection tasks
- Built-in real-time primary color correction, 1D/3D LUTs and image transformation
  - Real-time, non-committed, non-linear primary color correction
  - Supports ASC-CDL for interchange with digital intermediate grading and mastering solutions
  - Supports dissolves and dynamics between keyframes
  - Integrated still-store
  - Real-time pan & scan
- Built-in image dust busting, including semi-automatic dirt & scratch removal and image retouch
- Optional real-time secondary color correction with unlimited number of layers and windows including dissolves and dynamics between keyframes
- Optional real-time grain reduction and contour enhancement
- Optional image and audio ingest
  - Ingest from DataCines or VTRs
  - Ingest from digital cinematography camera files including; ARRIRAW, RedRaw R3D, DPX and others
- Linux-based turnkey system with optional local RAID storage or SAN/NAS configurations



# Software Specifications

FLEXXITY Archive: Ingest, Image Processing and Output Software for Archive & Restoration. Tools include timeline assembly of DPX and other image file formats, audio synchronization, image processing (real-time primary CC, 1D/3D LUTs, Transform, non-real-time dirt & scratch removal and manual retouch) and parallel generation of file, video and media formats (GUI pages: Process, Output and BackgroundTask).

Supported file output formats:

File Format	Video Codec	Audio Codec
AVI	AVI_MPEG4	AC3, MPEG2, PCM
Quicktime (.mov)	UNCOMPRESSED	AAC, AC3, MPEG2, MP3, PCM
	MPEG1	AAC, AC3, MPEG2, MP3, PCM
	MPEG2	AAC, AC3, MPEG2, MP3, PCM
	MPEG4	AAC, AC3, MPEG2, MP3, PCM
	DNxHD / VC3	AAC, AC3, MPEG2, MP3, PCM
	H261	AAC, AC3, MPEG2, MP3, PCM
	H263	AAC, AC3, MPEG2, MP3, PCM
	H264/MPEG4 part 10 / AVC	AAC, AC3, MPEG2, MP3, PCM
Avid MXF (HD 1920x1080)	DNxHD 36, 115, 120, 175, 185 Mbit	PCM
BWF (WAV)	n/a	Broadcast Wave Format extension for Microsoft WAVE, 16 or 24bit
Kodak Cineon	8, 10, 16bit	n/a
MXF XDCAM HD 422	MPEG2	PCM
MXF XDCAM HD	MPEG2	PCM
MXF XDCAM IMX 50	MPEG2	PCM
MXF MPEG 2	MPEG2	PCM
MPEG 1	MPEG1	MPEG1
MPEG 2	MPEG2	MPEG2
MPEG 4	MPEG4	AAC, AC3, MPEG2, MP3, PCM
MPEG 4	H264	AAC, AC3, MPEG2, MP3, PCM
MP3	n/a	MP3
OGG Theora	Theora Video	Vorbis
FLV	H263	MP3
F4V	H264/MPEG4 part10 / AVC	AAC
TIFF	8, 16 bit	n/a
DPX	8, 10, 16bit	n/a
DVD.ISO	MPEG2 NTSC/PAL	MPEG2
DVD VOB	MPEG2 NTSC/PAL	MPEG2
BMP	Windows Bitmap	n/a
J2K	JPEG 2000	n/a
J2P	JPEG 2000	n/a
PNG	Portable Network Graphics	n/a
PGM ASCII	Portable Graymap	n/a
PGM binary	Portable Graymap	n/a
PPM ASCII	Portable PixMap	n/a
PPM binary	Portable PixMap	n/a
WINDOWS MEDIA	VC-1 (WMV3, WVC1)	Windows Media Audio 2

*Technical specifications are subject to change without notice*

## SOFTWARE OPTIONS

These options are available with additional software licenses

- Optional image/audio ingest
- Optional real-time secondary color correction
- Optional real-time grain reduction and contour enhancement

Please consult your Digital Film Technology GmbH sales representative for further details.

# Hardware Specifications

## Workstation

- HP Workstation Z800 or Equivalent
- Dual Intel Xeon (6 core) CPU
- 12 GB RAM
- NVIDIA Quadro FX 5800 graphics card
- 24" HP L2465 LCD monitor
- 2x 146 GB internal SAS disks
- 4x 1000 Base-T Ethernet ports
- QLOGIC QLE2562 dual Fibre Channel8 adapter including cable
- SUSE Linux Enterprise Server (SLES) V10 workstation installed



## SDTV+HDTV output (DVS Atomix PCIe card + software license)\*

- TV standards (selectable): supports most common HDTV standards, including 2K DCI standards
- Video outputs: SD+HD SDI outputs for RGB 4:4:4/ YUV 4:2:2, 8/10 bit (BNC)
- Dual DVI 2K output for image resolutions of 2048x1744 or 2048x1556
- Up to 16 channels of embedded audio
- Hardware implemented color-space converter for storage in RGB/A format
- VITC and VANC reader and generator
- 3D LUT usable for the output
- Atomix breakout box for balanced AES/EBU audio and RS422 remote control

## Hardware Options

- Second 24" LCD monitor for dual GUI configurations
- Second SDTV+HDTV output card for up to 3 parallel video outputs
- Tangent Devices CP-200 series or WAVE control panels
- Local RAID or JBOD storage configurations
- 3rd party SAN storage configurations and control panels are supported

\* max. 2 parallel video outputs per card



**FLEXXITY Archive CP200 Control Panel**

# Unparalleled Engineering and Quality

The Digital Film Technology GmbH engineering, research & development, sales and support teams are known for their excellence in technology, design, quality, and customer service with products such as the SCANITY 4K/2K Film Scanner, the Spirit DataCine® and Scanner family, Shadow telecine, BONES, BONES Dailies, FLEXXITY software solutions, Scream Plus grain manager and LUTher color space converter.

## Technical Support Services & Training

The Digital Film Technology GmbH Technical Support Services & Training team offers complete service solutions that enhance your return on Digital Film Technology GmbH products and global system solutions.

Advanced training and proactive support reduce down time, and keep your equipment and staff performing at optimum productivity.

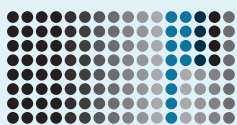
The pre-packaged suite of Digital Film Technology GmbH Services provide support throughout the entire process:

- Commissioning support
- On-site repair and maintenance services
- Hotline 24 hours a day, 7 days a week
- Comprehensive software and hardware support
- Advanced exchange hardware support
- Hands-on training classes

The worldwide, experienced Digital Film Technology GmbH Technical Support Services & Training experts can assist you with customized solutions.

For more information please contact your authorized Digital Film Technology GmbH representative or visit us at [www.dft-film.com](http://www.dft-film.com).

## Headquarters



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