



Capture **all** your live feeds & quickly play them out.

Media I/O is a highly flexible software solution for professional and broadcast quality ingest, playout, and transcode applications. Scaling to the biggest production demands, it supports almost any video format and transport, can run on-premises, virtualized, or in the cloud, and integrates seamlessly into your production workflow – allowing your team to focus on creating compelling content and less about the technical details knowing that it all just works.

Media I/O provides comprehensive support for a wide range of codecs, flexible wrapper selection, versatile deployment options, robust I/O capabilities, hardware compatibility, and integration with leading systems.

Ingest and playout is available for a wide range of the top industry codecs, including XDCAM, AVC-Intra, ProRes, DNxHD, DVCPRO HD, XAVC, and H.264 and wrapper formats, such as MXF Op1A, MOV, MP4 and AVI. Media I/O ensures compatibility with the most popular and widely used codecs in the industry, allowing you to work with diverse media formats effortlessly. With support for Baseband SDI and IP I/O, Media I/O enables you to leverage both traditional and IP-based workflows. It supports industry-standard protocols such as 2110, NDI, HLS, and SRT, ensuring compatibility with a variety of input and output formats.

Media I/O is designed to run on commercial off-the-shelf (COTS) hardware, including servers and video boards. This provides cost-effective and readily available hardware options, allowing you to leverage existing infrastructure or choose the hardware that suits your requirements. Available to deploy on-premise | virtualized | or in the cloud for both ingest and playout channels.

Fully compatible with AMP (Automation and Media Protocol) and VDCP (Video Disk Control Protocol) protocols. This enables seamless integration and control of your ingest and playout workflows from external systems.

When working with growing files, Media I/O allows direct access to the content in popular non-linear editing (NLE) tools such as Adobe Premiere Pro and Final Cut Pro. This means you can start editing your content while it is still being ingested, saving valuable time and ensuring efficient workflows. Additionally, our software supports live ingesting feeds for playout, giving you real-time access to incoming content.



Speed

Media I/O gives you instant access to live ingesting content and allows for edit-while-ingest to accelerate the production process for both logging and editing workflows.



Scalability

Media I/O gives you and your engineering department a highly flexible and scalable software solution that can grow with your business goals and workflow needs.



Dynamic

Media I/O is built completely on a software-based framework that allows for both on-premises and cloud-based architectures to give you the ultimate flexibility in hosting your solution.

Codecs	
SD MPEG DV ProRes	IMX/D10 625i50 30/40/50 Mb or IMX/D10 525i60 30/40/50 Mb DV 25, DVCPRO25, DVCPRO50 25-50 Mbps I-frame 422 and LT modes
HD 1.5 G (1080i 50/60, 720p 50/60) MPEG-2 DV XDCAM HD AVC-Intra XAVC-I (Sony) XAVC-Long GOP AVC/H264 VC-3 (DNxHD) ProRes Ross XPression Codec	18-85 Mbps LGOP; 50-100 Mbps I-frame DVCPRO HD DVCPRO HD 18, 25, 35, 50 Mbps Class 50, Class 100 and Class 200 1080i @ 25, 29.97 fps 720p @ 50, 59.94 fps Class 50, Class 100 and Class 200 HD Profile for M4 Style (MP4) HD Profile for XD Style (MXF) Main (ISO/IEC 13818-1/2) Profile LB, SQ and HQ I-frame 422, Proxy, LT and HQ modes I-frame 422 with 8 bit Alpha
HD 3G (1080p 50/60) AVC-Intra XAVC-I (Sony) XAVC-Long GOP AVC/H264 VC-3 (DNxHD) ProRes Ross XPression Codec	Class 50, Class 100 and Class 200 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps Class 50, Class 100 and Class 200 HD Profile for M4 / XD Style (MP4/MXF) Main (ISO/IEC 13818-1/2) Profile LB, SQ and HQ I-frame 422, Proxy, LT and HQ modes I-frame 422 with 8 bit Alpha
UHD XAVC-I (Sony) XAVC-Long GOP AVC/H264 VC-3 (DNxHR) ProRes Ross XPression Codec	Class 100, Class 300 and Class 480 4K Profile for M4 and XD (MP4 and MXF) 4K 4:2:2 10-bit (MXF) Main (ISO/IEC 13818-1/2) Profile LB, SQ, HQ and HQX I-frame 422, LT and HQ modes I-frame 422 with 8 bit Alpha

Raster	
SD	525i @ 29.97 fps or 625i @ 25 fps
HD 1.5G	1080i @ 25, 29.97 fps or 720p @ 50, 59.94 fps
HD 3G	1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps
UHD 12G	2160p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps
Remote Control	
Automation Control	Clip playback & record via VDCP (over IP or RS-422) Clip management/playback via AMP-over-IP
Connectivity	
SDI Input	Up to four SD/HD channels, one UHD channel (X1)* Up to eight SD/HD channels, two UHD channel (X2)*
SDI Output	Up to four SD/HD channels, one UHD channel (X1)* Up to eight SD/HD channels, two UHD channel (X2)*
IP I/O	Optional dual 10GE ports for NDI® I/O Optional dual 10/25G SFP ports for NDI® I/O Optional dual 25GE ports for UHD/HD 2110 IP I/O
Connectors	AES and LTC Two 1GE ports to connect to the server
Support Video Board	
AJA	AJA Corvid 88 AJA KONA 5
MATROX	MATROX ® DSX LE5 MATROX ® DSX LE5 D25 (2110)
Audio Processing	
Channels	SMPTE 299M/272M, up to 16 embedded per video channel
Formats	Uncompressed PCM 16bit, 24bit @ 48 kHz) MPEG4-Audio (AAC)
Supported IP Streams	
SRT	Secure Reliable Transport (MPEG TS)
HLS (.m3u8)	HTTP(S) (MPEG TS & Fragmented MP4)
RTSP	Real Time Streaming Protocol (Elementary Media Essence)
MPEG TS	TCP/UDP
NDI	Newtek NDI®

Edit While Capture

Final Cut X	ProRes, AVC-Intra and XDCAM in MOV wrapper
Adobe Premier Pro	IMX 30/40/50 in MXF wrapper AVC-Intra Class 50/100 in MXF wrapper XDCAM HD 18, 25, 35, 50 Mbps in MXF wrapper

Data

Closed, Open, Live Captions	EIA-608, EIA-708
Ancillary Data	VBI, VANC, SCTE-104
Reference	Analog black with color burst, PTP for IP I/O

Media Storage Options

Ross EVO Signature Series 8-Bay Storage - 15 TB SSD	
Ross EVO Signature Series 16-Bay Storage - 64 TB	
Ross EVO Signature Series 16-Bay Storage - 128 TB	
NAS via Ethernet	SNS, MediaGrid, Isilon, IBM GPFS, Jellyfish, Promise
SAN via Fiber Channel	Quantum, DDN, Hitachi

Minimum Required Hardware

Up to 1 UHD or 4 HD	Windows Server 2019 64-bit Dual Intel Silver 2.4GHz, 16 Cores 64 GB RAM 2x480GB SSD SATA
Up to 2 UHD or 8 HD	Windows Server 2019 64-bit Dual Intel Xeon 2.2GHz, 26 Cores 64 GB RAM 2x480GB SSD SATA
Management and Control	Windows Server 2019 64-bit Intel Core i5 4.3 Ghz 16 GB RAM 512GB SATA SSD

Video Router Protocol Support

API V1

SLX-161
 Sony - Analog
 Sony - DVS
 Sony - PVS
 GvG - Performer
 GvG - Native
 Leitch - ASCII
 PESA
 VikinX

API V2

Leitch - Pass Through
 Leitch - Terminal
 Pro-Bel - General Switcher Protocol
 Pro-Bel - General Router Protocol
 Pro-Bel - TX500 Series Mixer
 Pro-Bel - Master Control Switcher Protocol
 B4M - MultiCam Router
 Quartz
 Kramer - Protocol 2000
 Kramer - SD7308
 Kramer - ASCII
 Vortex
 BTS - ASCII
 Klotz - ASCII
 Thomson - Saturn Master Control Switcher
 Grass Valley - Router Control Language
 Grass Valley - Acappella (T/Ci)
 NetWork - VikinX
 Sony - CART
 Sony - CART +
 Sony - CART ++
 Sony - DFS 700
 Sigma
 Crystal Vision SW0808
 PESA - CPU Link Protocol
 Datavideo - SE800
 nVision - NV9000 (TCP/IP)
 BlackMagic - VideoHub (TCP/IP)
 AJA - KUMO (HTTP)
 PESA - P1N (TCP/IP)
 Evertz QMC
 BTS - ES Switch
 Oresmaster
 Utah Scientific RCP-3A
 SW-P-08
 Oxtel Protocol
 Imagine LRC