

20.1 Data Sheet – Supported File Formats

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Epic	
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QA	

Assumptions

- Implementation of Avid proxy formats produced by Edge impose a number of known Avid-specific conversions. Avid proxies are under consideration and will be included upon binding commitment.
- Implementation of ingest through rewrapping (instead of transcoding) of formats with Avid-supported video and audio codecs are under consideration and will be included upon binding commitment.
- Implementation of ingest through transcoding to Avid-supported video codecs other than DNxHD or DNxHR are under consideration and will be included upon binding commitment.

Limecraft Flow and Edge – Ingest File Formats

#	File Container	Codecs and Variants	Edge ingest	Flow ingest	Status	Notes
1	MXF	<ul style="list-style-type: none"> • MXF OP1a <ul style="list-style-type: none"> • Sony XDCAM (DV25, MPEG IMX codecs), XDCAM HD and XDCAM HD 422 <ul style="list-style-type: none"> • also for Canon C300/C500 and XF series • Sony XAVC (incl. XAVC Intra and XAVC-L codecs) • ARRI Alexa MXF (DNxHD codec) • AS-11 MXF (MPEG IMX/D10, AVC-I codecs) • MXF OP-atom <ul style="list-style-type: none"> • P2 (DV codec) and P2 HD (DVCPRO HD, AVC-I 50 and AVC-I 100 codecs) 			Deployed	<ul style="list-style-type: none"> • No P2 spanned clips supported at the moment. • Referencing original OP1a media from Flow AAFs is possible using AMA media linking in Avid. • AAF workflows for P2 are not implemented end-to-end yet.
1.1	MXF	<ul style="list-style-type: none"> • Sony RAW and X-OCN (XT, LT, ST) <ul style="list-style-type: none"> • for Sony Venice, F65, PMW-F55, PMW-F5 and NEX-FS700 			Deployed. Only available in Edge.	<ul style="list-style-type: none"> • Due to the heavy data rates involved in processing these files, a properly provisioned system is required, featuring fast storage (SSD or RAIDed spinning disks) and a recent GPU (with at least 4GB of memory)
2	R3D	<ul style="list-style-type: none"> • R3D clips from all Red Digital Cinema cameras (incl. RED One and RED Epic) 		*	Deployed	<ul style="list-style-type: none"> • Flow ingest of R3D clips only supports single-file clips. Full RED magazine and spanned clips ingest is supported through Edge.
3	ARRI	<ul style="list-style-type: none"> • ARRI Alexa RAW (incl. Open Gate sensor RAW imagery). • ARRI Alexa MXF/ARRIRAW (from ARRI Alexa Mini) • ARRI Alexa MXF/ProRes (from ARRI Alexa Mini LF) 			Deployed. Only available in Edge.	<ul style="list-style-type: none"> • Due to the heavy data rates involved in processing these files, a properly provisioned system is required, featuring fast storage (SSD or RAIDed spinning disks) and a recent GPU (with at least 4GB of memory) • Currently, only the Alexa line of cameras (Alexa, Alexa SXT and Alexa Mini) is supported, not the Alexa 65.

4	Quicktime	<p>With video in following formats:</p> <ul style="list-style-type: none"> • ProRes • DNxHD • DV • Apple Video • Apple M-JPEG • Quicktime Animation • Quicktime Graphics • Sorensen video <p>and audio in following formats:</p> <ul style="list-style-type: none"> • PCM • AAC • alaw/μlaw • MP3 • ALAC 	✓	✓	Deployed	<ul style="list-style-type: none"> • This includes a.o. Quicktime clips generated by ARRI Alexa and Amira products, Blackmagic Design cameras, Video Devices PIX devices, Atomos recorders, Convergent Design Odyssey recorders.
5	MP4	<p>All MP4 with H.264 and AAC or MP3/MP2 audio.</p> <p>This includes support for the following types of cameras:</p> <ul style="list-style-type: none"> • GoPro HD and 4K • XDCAM EX • XAVC S 			Deployed	<ul style="list-style-type: none"> • XDCAM EX support includes reading timecode metadata (only available in Edge)..
6	MPEG TS/PS variants	<ul style="list-style-type: none"> • AVCHD • DVD VOB • MPG (MPEG-1 video and audio) 			Deployed	
7	Legacy Formats	<ul style="list-style-type: none"> • AVI (incl., MJPEG, XViD, DivX, Cinepak and uncompressed codecs) <ul style="list-style-type: none"> • Support for Starlight low-light cameras • WMV (with Windows Media Video 7, 8, 9 codecs for video and Windows Media Audio 1, 2, 9 Pro and Lossless codecs for audio) • DV (SD DV-based bitstreams without container, but including uncompressed audio) 			Deployed	
8	Web Formats	<ul style="list-style-type: none"> • WebM (with VP8 and VP9 video and Vorbis and Opus audio) • Ogg (with Theora video and Vorbis audio) • Flash FLV (with Sorenson Spark, VP6, H.264 video and MP3, ADPCM, Nellymoser, Speex and AAC audio) • MKV (with a variety of codecs, incl., H.264, XViD video and uncompressed WAVE, MP3, FLAC, AAC and AC-3 audio) • ASF (with WMV video and WMA audio, cf. WMV format) 			Deployed	
9	Image Sequences and time lapses	Sequences of JPEGs, PNGs, GIFs.		*	Deployed	<ul style="list-style-type: none"> • No timecode is imported when interpreting time lapse sequences • In order to be imported as a sequence, a consistent supported file pattern needs to be present in all image file names. • Currently, image sequences are imported with a default frame rate of 25 FPS. <p>* Still image formats can be ingested by Flow directly, but as individual images and not as image sequences.</p>

10	Audio Formats	<ul style="list-style-type: none"> • WAVE and BWF (support for both poly and mono-wave BWF files) <ul style="list-style-type: none"> • Timecode and metadata are read from BWF audio files. • AIFF • MP2/MP3 streams • MP4 (with AAC, MP3, PCM and ALAC audio) • OGG (with Vorbis and Opus audio) • FLAC 	✔	✔*	Deployed	<p>* Poly-wave BWF files are not interpreted as related when ingested directly into Flow using web-based uploads, Edge should be used to support this use case.</p>
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