



## In-depth analysis of MXF files

## Configurable validation rules

## Easy integration into your workflows

The Material Exchange Format (MXF) is a file format for audio-visual material, standardised by SMPTE. Due to its flexibility, extensibility and the tight integration of essence and metadata, MXF is the file format of choice for the interchange and storage of finished or “almost finished” audio-visual material and associated metadata.

MXF Analyser is a market-leading software solution for MXF file analysis. MXF Analyser examines and validates conformance to the MXF SMPTE standards, and conformance to certain application parameters, such as operational pattern, essence container constraints, and payload formats. Analysis results are delivered in an intuitive user interface, and in machine-readable reports..

Products supporting MXF are essential for A/V content exchange, and for interoperability between components and applications in IT-based production facilities. It is vitally important to ensure that products implementing MXF do comply with the relevant specifications, and to perform operational validation of incoming MXF files.

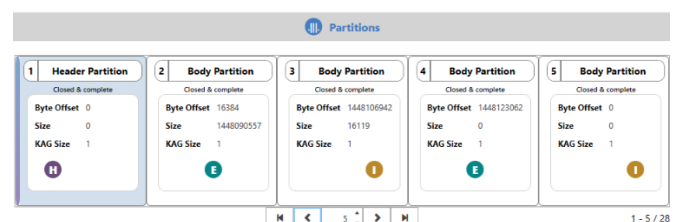
MXF Analyser supports configurable validation rules and profiles, and can easily be integrated into your workflows.

## Key Features

- Application Specifications support configurable validation rules for specific user requirements and profiles, such as RDD-9, AS-11, AS-10, ARD/ZDF
- Application Specifications support user-specific reclassification of errors
- Web service interfaces for integration in service oriented architectures (SOA)
- Automatic validation of incoming MXF files performed based on the Watch Folder concept
- High performance (up to approx. 16x real-time)
- Intuitive graphical user interface

## Scope of Analysis

- KLV (SMPTE 336M)
- Partition Multiplex
- Header Metadata structure
- Essence containers - values of header metadata properties that relate to essence containers (MXF structural metadata), file structure (e.g. operational pattern) or are defined in SMPTE registries (i.e. RP224)



Partitions				
1	Header Partition	2	Body Partition	3
	4	5		
Closed & complete				
Byte Offset	0	16384	1448105942	1448123062
Size	0	1448090537	16119	0
KAG Size	1	1	1	1
	H	E	I	E
				I
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## Supported Essence Types

- DNxHD
- AVC-LongGOP (AVC-Proxy, XAVC, AVC-Ultra)
- AAC-AudioIMX/D10
- DV/DIF (IEC 61834 and SMPTE 314M)
- MPEG-2 video and audio
- PCM audio
- JPEG 2000
- MPEG 4/AVC
- Apple ProRes

## Results presentation

- Traffic light representation of analysis result
  - ✔ = pass with respect to MXF standard
  - ✘ = fail with respect to MXF standard
  - ! = standard recommendation not followed
  - i = detailed information available
- Detailed analysis results representing the metadata and file multiplex structure, including index tables (formatted according to SMPTE 434)

## Platform Requirements

- Windows 10, 8.1 and 7 (64 bit), Windows Server 2012 R2 (64 bit)
- Minimum Dual core processor (x86-based, 2 GHz)
- Minimum 2 GB RAM

Analysis Overview			
Analysed MXF File:	C:\Users\bill.chard\Desktop\4752684-4679-4834-a344-d99b157ac1e3.tl.j2k.mxf		
<span style="color:red">✘</span>	Standard compliance	<span style="color:red">✘</span> 11 <span style="color:orange">!</span> 0 <span style="color:blue">i</span> 44	→ Results
<span style="color:red">✘</span>	appSpec_AS-11-HD-1.1 (Version 3.1)	<span style="color:red">✘</span> 13 <span style="color:orange">!</span> 0 <span style="color:blue">i</span> 44	→ Results

Details	
<b>Identification</b>	
Class:	Error
ID:	MXF:40275
Description:	Incorrect value for, or superfluous or missing element in PartitionPack:EssenceContainer.
<b>Status</b>	
Result:	Fail <span style="color:red">✘</span>
Message:	The correct number of elements for property "EssenceContainers" is 1 and not 2 as encoded in the file.
<b>Origin</b>	
203bfe87-6d1a-447c-811a-a572b68a4242.main.j2k.mxf	
<b>Standard</b>	
SMPTE 377-1-2011	
<b>Values</b>	
Value Set 1	
<b>Name:</b>	EssenceContainers
Value:	2
Status:	Invalid <span style="color:red">✘</span>
Kind:	ActualValue
Layer:	MxfWrapper
Retrieval Method:	Readout
File Category:	MXF
File:	203bfe87-6d1a-447c-811a-a572b68a4242.main.j2k.mxf
Location:	Byte Offset: 16384
<b>Name:</b>	EssenceContainers
Value:	1
Status:	Valid <span style="color:green">✔</span>
Kind:	ActualValue
Layer:	MxfWrapper
Retrieval Method:	Calculated
File Category:	MXF
File:	203bfe87-6d1a-447c-811a-a572b68a4242.main.j2k.mxf
Location:	Byte Offset: 16384

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