Audiovisual

Definition

Audiovisual materials at Yale University Library include analog audio and video formats, digital audio and video formats, and film.

External Resources

One Format Does Not Fit All: FADGI Audio-Visual Working Group's Diverse Approaches to Format Guidance [1] (October 31, 2013)

Carl Fleischhauer, "Format Considerations in Audio-Visual Preservation Reformatting: Snapshots from the Federal Agencies Digitization Guidelines Initiative [2]," *Information Standards Quarterly* 22, no. 2 (Spring 2010): 34-40.

Library of Congress Audio-Visual Conservation Resources [3](Last updated: 8/3/2007)

Guidelines

Below is a chart showing AV preservation format recommendations YUL is considering adopting in accordance with a consulting report submitted by Audiovisual Preservations Solutions in June 2013. Two competing standards are currently in use at YUL: (1) uncompressed 10-bit video, which results in large files, and (2) mxf-wrapper motion JPEG 2000, which is not 100% open source.

Format	Preservation Master	Access Master	Access Copy
Audio-Analog	- Broadcast Wav File (BWF) wrapper - PCM uncompressed - 24-bit - 96kHz	n/a	- MPEG Audio Layer 3 (MP3) - Bitrate 256Kbps
Audio-Digital	- Broadcast Wav File (BWF) wrapper - Native uncompressed data at original sample rate and bit-depth	n/a	- MPEG Audio Layer 3 (MP3) - Bitrate 256Kbps
Video - Analog Standard Definition	- Quicktime wrapper (.mov extension) - Video encoded as 10-bit YUV 4:2:2 uncompressed (v210) - Audio encoded as uncompressed PCM, 48kHz - Maintain original aspect	- Quicktime wrapper (.mov extension) - Video encoded as DV - Audio encoded as uncompressed PCM, 48kHz - Maintain original aspect ratio, recording standard, interlacing, number of	- MPEG4 wrapper (.mp4 extension) - Video encoded as H.264 - Audio encoded as uncompressed AAC, 44.1kHz, 256Kbps - Bitrate 5.0Mbps

	ratio, recording standard, interlacing, number of audio channels, and auxiliary information such as original timecode and closed captioning	audio channels, and auxiliary information such as original timecode and closed captioning	
Video-Digital	- Native encoding and data rate in Quicktime wrapper (.mov extension), e.g. DV for MiniDV and DVCam - Maintain original aspect ratio, recording standard, interlacing, number of audio channels, and auxiliary information such as original timecode and closed captioning	n/a	- MPEG4 wrapper (.mp4 extension) - Video encoded as H.264 - Audio encoded as AAC, 44.1kHz, 256kbps - Bitrate 5.0Mbps
Film	16 and 8 mm: - 2k 10-bit RGB 4:4:4 DPX log - Uncompressed 96kHz/ 24-bit Broadcast Wav File (BWF) for audio 35 mm: - 4k 10-bit RGB 4:4:4 DPX log - Uncompressed 96kHz/ 24-bit Broadcast Wav File (BWF) for audio	- MXF wrapper - AVC-Ultra	- MPEG4 wrapper (.mp4 extension) - Video encoded as H.264 - Audio encoded as uncompressed AAC, 44.1kHz, 256kbps - Bitrate of 5.0mbps

Links
[1] http://blogs.loc.gov/digitalpreservation/2013/10/one-format-does-not-fit-all-fadgi-audio-visual-working-groups-diverse-approaches-to-format-guidance/ [2] http://www.digitizationguidelines.gov/audio-visual/documents/IP_Fleischhauer_AudioVisual_Reformatting_isqv22no2.pdf [3] http://www.loc.gov/avconservation/preservation/resources.html