Editing Videos, Adding Sound, Splitting, Joining, and Compressing

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1. A Lot has changed over the years.

• Movies and Videos changed formats many times.

• Sharing techniques have also changed.

• Storage methods have changed.

• The key to this presentation is to have your video files in MP4 format.

2. Common Old Movie Formats

• 8 mm Film (1930's - 1940's)

• Super 8mm Film (1960's)

• Analog Tape (1980's) (Made with Analog Camcorders or Video Cameras)

• Digital Tape (Late 1990's) (Made with Digital Video "DV" Recorder on tape)

• Digital Chip (2010's) Cameras stored on a chip.

• Cell Phones changed everything (2020's) Cell Phones stored videos on Internal Memory or

SD Chips.

3. What is Analog verses Digital

• Analog, If a video is on VHS type tape, the iron particles in the tape will be magnetized to

mimic a TV signal.

• Digital, means you're using digits: 0s and 1s, the digits of the binary system.

4. When I was a kid…

• My parents bought an 8mm movie camera in 1939.

• Every time visitors came over we had to clean up and go outside to make movie pictures.

My brothers and I hated it. Today I am very thankful.

• Over the years my parents took 27,000 feet of movies contained on 68, seven inch reels.

5. Movies and Videos last forever!

• WRONG! WRONG! WRONG!

• The old 8mm and Super 8mm films get brittle with age. They also fade with age.

• Videos from Camcorders recorded on magnetic tape (VHS and VHS-C) are rapidly

deteriorating from reaction to the earth's magnetic field.

6. The Problem With Video and Audio Tape

• Video and Audio tape starts to lose quality within a few years. If stored near a TV it may

begin to deteriorate in less than a year.

• The earth's magnetic field will begin to realign the magnetic particles in a tape. Earlier TV

sets did the same thing when turned on or off. Degaussing of the TV caused major

damage to tapes.

• Eventually the images and sound will be lost.

7. Symptoms of deterioration

• Sound begins to weaken, background noise increases, distortion increases. The sound

becomes muffled. Video starts to fade, color is not as sharp, white specs begin to appear.

8. Original video image on left, faded image after several years on right.

9. So How can I digitize those old movies?

• There are two methods that I have used.

• 1. I projected the movie and recorded it with a digital camcorder.

• 2. I digitized the movie using a Wolverine 8mm & Super 8mm Digital Movie Maker Pro.

• Which came out the best? The Wolverine did.

10. Wolverine 8mm & Super 8mm Digital MovieMaker Pro Film Digitizer

11. The Wolverine can digitize them.

• Many local libraries will lend out the Wolverine if you have a library card.

• The Mukwonago Community Library issued me a library card and let me take the Wolverine

8mm and Super 8mm digitizer home for a week without charge.

• This device advances your film one frame at a time and makes a digital video for you.

• Go to the following link to see a review of the device on YouTube. Note the address is case

sensitive.

https://www.youtube.com/watch?v=eb5Ve_S YNoA

12. Cost to purchase is generally less than $325, but first check local libraries.

• The Wolverine system does an excellent job with very high quality.

• It will copy up to 9 Inch reels automatically and unattended.

13. Wolverine available at Mukwonago Public Library

• 1. Wolverine Moviemaker Pro 8mm/Super 8 film to digital converter (Mukwonago pick up & return only).

• Description: 1 film digitizer : metal, plastic, black ; 10.6 x 6.5 x 4.5 in.

• Series: Thingery at Mukwonago Public Library

14. What format does a Wolverine save the video in?

• The Wolverine scans and directly saves digital movies into SD/SDHC cards (32GB max). It

Converts 8 and Super 8 movies into MPEG-4 (MP4) digital movie files at 720P.

• MP4, known as MPEG-4, is the preferred format for digital videos.

• All of the MPAFUG YouTube videos are in MP4 format.

15. If you have other formats….

• There are converter apps available on line or on your computer that will convert any

format to MP4.

• A popular free app is VLC Media Player. https://www.videolan.org

16. VLC video formats

• VLC can read a large number of popular video and audio formats, such as MPEG, MP4,

MOV, WMV, H.263, WAV, FLV, and AVI.

• The VLC player can also convert media into many of the same formats that it is able to

read, including the MPEG, ASF, AAC, and MP3 formats.

VLC Media Player is FREE

https://www.videolan.org

17. MP4 Tools: Splitter and Joiner

• MP4Tools is a collection of cross-platform free tools to manipulate MP4 files. It is very easy to use.

It contains the following applications:

• MP4Joiner is a free application that allows join multiple MP4 files into one without

reencoding and without quality loss.

• MP4Splitter is a free application that allows split a MP4 file in multiple files without

reencoding and without quality loss

• It is Open Source Software and is completely free.

• Download MP4Tools-3.8-win32.exe (MP4Tools)

https://sourceforge.net/projects/mp4joiner/files/MP4Tools/3.8/MP4Tools-3.8-

win32.exe/download

18. MP4 Splitter and Joiner

19. How to Edit an MP4 by splitting

• If you have an MP4 file that is too long or contains sections that you would like to

eliminate, Use the Splitter Tool.

• 3.42MB = 2.16MB + 1.26MB

20. How to edit an MP4 by joining

• If you have several MP4 files that you would like to make into a single MP4 file, Use the Joiner Tool.

• 2.16MB + 1.26MB = 3.42MB

21. So How can I digitize those old movies?

• I projected the movie and recorded it with a digital camcorder.

• Today you can do the same thing with a modern smart phone (Cell Phone)

22. The economical way of doing it.

• Place a bright white (98-110%) 8-1/2 X 11 paper on a wall. Do not use glossy paper.

• Set the projector about 10 inches away and project an image so that it is about 3 inches

wide.

• Set your cell phone or a digital camcorder to the side of the projector and record the

image from the white paper.

• Darken the room during recording.

23. Camcorder next to projector

24. Smart Phone next to projector

25. But what about the "clickity clack" noise from the projector?

• Add music from a tape recorder, music CD, MP3 Player or any other music source.

• Or you can block any sound by plugging a blank plug into your recorder audio input jack.

26. Don't forget that you can add voice and music by mixing.

27. To remove old sound and add new sound.

• To add music to an MP4 file with VLC, you need to:

• Open VLC. • Click "Media" > "Convert/Save" > "+Add" to import an MP4 video to it.

• Click the wrench icon in the "Profile" option.

• Choose "Audio codec".

• Unselect "Audio" to disable its soundtrack, and save the changes.

• Browse a destination folder for your video and add ".mp4" to the file name.

• Hit Start to combine audio and video in VLC and save it to your computer.

28. VHS Converter at Mukwonago Library

• Videorecording, Three Dimensional Object (Artifact), Visual Materials

• Digital VHS converter [Pick up & return at owning library only].

• Canoga Park, California : Diamond Multimedia, [2020]

• 1 video converter : plastic, black and white ; 6.3 x 1 x 3 in. + RCA cable, S-Video Cable,

USB cable w/power adapter, memory card w/reader, 2 user manuals, guidelines.

• Summary:

• Capture/record video from VHS, Hi8, Camcorder, set top box or any source with

composite/S-video RCA AV outputs. Standalone converter to MP4 format without the need of a PC.

29. Compress an MP4 file using HandBrake

https://handbrake.fr/rotation.php?file=Hand Brake-1.9.0-x86_64-Win_GUI.exe

• Free Program that can compress or reduce the size of an MP4 file.

HandBrake Website: https://handbrake.fr

HandBrake starting page

30. Results after compressing file using HandBrake

• 1.55GB 456MB

• Before After 1.094GB Reduction

31. Free Download Video Pad by NCH

• https://www.nchsoftware.com/videopad/

• You will be asked to verify that Video Pad is being used for non-commercial, home use only.
https://www.nchsoftware.com/videopad/tut orial.html#addaudio

32. Video Pad by NCH how to:

33. An MP4 video file without sound

34. A sound file without a viseo

35. After adding an audio file to an MP4 using Video Pad Editor by NCH

The MP4 file after adding sound

36. Are There Any Questions?