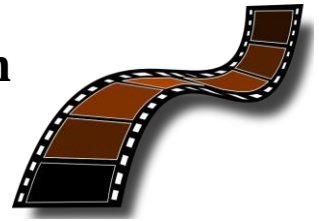




Video: Capture, Editing, and DVD Creation



A Good News / Bad News Story

- The good news:
 - Capture video from many sources.
 - Digitize video for Internet distribution.
 - Burn them to DVD so you can watch them on your home DVD player.
- The bad news:
 - As Einstein conjectured, Time = Money
 - To do this well requires a time/monetary investment.
 - The size of this investment depends on the complexity of tasks & quality of results.

Video Film Capture

- If you wish to transfer video film (such as 8mm home movies) to a computer, you have a couple of choices :
 - Project the film on a wall or using a telecine, and capture the images with a video camera. See this website for more info:
<http://www.videomaker.com/article/12192>.
 - Find one of the multitudes of companies that provide this service for a fee.

VHS / Beta Max Capture

- A more common video transfer need is to copy video from magnetic tape to a computer.
- Again, there are a multitude of companies that provide this service for a fee.
- We'll discuss another solution in a few moments.

Other Common Video Sources

- In addition to film and tape, video can come from other sources:
 - Your television cable, dish, on-air, or DVR.
 - YouTube, Google Video, and other online sources.
 - Digital still/video cameras.
- Some Web sites have video files available for download, already in forms that are usable by DVD authoring software.
- Examples:
 - <http://spaceflight.nasa.gov/gallery>
 - <http://www.ncsu.edu/biomovies/shortclips/Inverts.html>
 - <http://movie-list.com>
- Streaming video is harder to capture, since it was not intended to be downloaded. Examples include videos found on <http://youtube.com>.
- A site that makes it possible to capture video from some of these sites is:
<http://keepvid.com>
- Just enter the URL of the video you want to capture, and this site will attempt to deliver a copy to you.

Capturing Video to Computer

- Many computers have S-Video or HDMI connectors, but these usually are for video output only.
- A digital video converter, such as the Canopus ADVC unit shown to the right, is a wise investment if you plan to do quite a bit of video capture.
- Such a unit usually has several common video inputs (RCA, S-Video, HDMI) and common computer outputs (USB, Fire-Wire).
- Prices range from about \$100 to \$400+.



Long-Term Video Storage

- What are the best long-term video storage media? Generally, DVD is your best choice today.
- There are two basic types of DVDs for video:
 - Video DVDs – These are compatible with consumer DVD players, and include the pre-recorded movie DVDs that one purchases.
 - Data DVDs – These contain video files, but in a format like that found on a computer hard disk. They may or may not be compatible with consumer DVD players.
- If you plan to transfer the files again, later, it is better to save them to a hard disk, flash drive, or data DVD.
- Another media becoming popular today is a network attached storage device, but this is beyond the scope of today's discussion.

DVD AUTHORIZING

- Here are some DVD authoring packages that I have tried and found useful:
 - DVD Flick (freeware) – <http://dvdclick.net>.
 - Corel Video Studio – About \$100.
 - CyberLink PowerDirector 8 Deluxe – About \$60 from Herman Street Software, when using the promotional code PDSAVE20 at checkout.
- The general sequence of events in DVD authoring:
 - Capture videos to flash or hard disk.
 - Edit the videos to remove commercials, highlight particular scenes, and so on.
 - Organize the videos into a project, adding menus, chapters, and such.
 - Burn project to DVD.
- DVD Flick is an open source product.
- It is capable of producing basic video DVDs, with menus. It is a no-frills application, but you can't beat the price.
- A simple DVD Flick tutorial can be found at <http://dvdclick.net/guide>.

DVD AUTHORIZING

- DVD ripping is the process of copying the video/audio contents of a DVD to a hard disk.
- This should be legal as long as it is for your own use, not for distribution.
- The DVD ripping process usually removes DRM (Digital Rights Management) protection from the video, so that it can be viewed on a computer, TV, etc. without the original media.
- We will not discuss the techniques, but here is a site where you can learn more:

<http://www.videohelp.com/guides/category/dvd-backup-articles-6;42#534>