Video Editing

March 28, 2017

Contents

Chapter 1

Introduction

1.1   what is video edition

The term video editing can refer to: The process of manipulating video images. Once the province of expensive machines called video editors, video editing software is now available for personal computers and workstations. Video editing includes cutting segments (trimming), re-sequencing clips, and adding transitions and other Special Effects.[1] Linear video editing, using video tape and is edited in a very linear way. Several video clips from different tapes are recorded to one single tape in the order that they will appear. Non-linear editing system (NLE), This is edited on computers with specialized software. These are non destructive to the video being edited and use programs such as Adobe Premiere Pro, Final Cut Pro and Avid. Offline editing is the process in which raw footage is copied from an original source, without affecting the original film stock or video tape. Once the editing has been completely edited, the original media is then re-assembled in the online editing stage. Online editing is the process of reassembling the edit to full resolution video after an offline edit has been performed and is done in the final stage of a video production. Vision mixing, when working within live television and video production environments. A vision mixer is used to cut live feed coming from several cameras in real time.

1.2   Background

Video editing is the process of editing segments of motion video production footage, special effects and sound recordings in the post-production process. Motion picture film editing is a predecessor to video editing and, in several ways, video editing simulates motion picture film editing, in theory and the use of linear video editing and video editing software on non-linear editing systems (NLE). Using video, a director can communicate non-fictional and fictional events. The goals of editing is to manipulate these events to bring the communication closer to the original goal or target. It is a visual art.[2] Early 1950's

video tape recorders (VTR) were so expensive, and the quality degradation caused by copying was so great, that 2 inch Quadruplex videotape was edited by visualizing the recorded track with ferrofluid and cutting with a razor blade or guillotine cutter and splicing with video tape. The two pieces of tape to be joined were painted with a solution of extremely fine iron filings suspended in carbon tetrachloride, a toxic and carcinogenic compound. This "developed" the magnetic tracks, making them visible when viewed through a microscope so that they could be aligned in a splicer designed for this task. Improvements in quality and economy, and the invention of the flying erase-head, allowed new video and audio material to be recorded over the material already recorded on an existing magnetic tape and was introduced into the linear editing technique. If a scene closer to the beginning of the video tape needed to be changed in length, all later scenes would need to be recorded onto the video tape again in sequence. In addition, sources could be played back simultaneously through a vision mixer (video switcher) to create more complex transitions between scenes. A popular 1970-80s system for doing that was the U-matic equipment (named for the U-shaped tape path). That system used two tape players and one tape recorder, and edits were done by automatically having the machines back up, then speed up together in synchrony, so the edit didn't roll or glitch. Later, 1980-90's came the smaller beta equipment (named for the B-shaped tape path), and more complex controllers, some of which did the synchronizing electronically.

Editor in linear VCR suite There was a transitional analog period using multiple source videocassette recorder (VCR)s with the EditDroid using LaserDisc players, but modern NLE systems edit video digitally captured onto a hard drive from an analog video or digital video source. Content is ingested and recorded natively with the appropriate codec which will be used by video editing software to manipulate the captured footage. High-definition video is becoming more popular and can be readily edited using the same video editing software along with related motion graphics programs. Video clips are arranged on a timeline, music tracks, titles, digital on-screen graphics are added, special effects can be created, and the finished program is "rendered" into a finished video. The video may then be distributed in a variety of ways including DVD, web streaming, QuickTime Movies, iPod, CD-ROM, or video tape

Chapter 2

Video Editing SW and Hardware

intro to chapter 2

2.1   Video Editing Computer

Video editing doesn't require an expensive computer, especially if you're a beginner. You'll need a decent monitor and video card, which come installed on most new computers. If you have an older computer, check it against your video editing software specifications to make sure it will work for video editing. Unfortunately, many older computers simply aren't fast enough for it, and you'll need to upgrade your whole system.

2.2   Storage Space on the Video Editing Computer

Digital video footage - especially high-definition footage - takes up a lot of drive space, and you'll need somewhere to put it. An external hard drive is one way to solve that problem. But if you buy a video editing computer with a lot of internal drive space, you can put off buying the external hard drive for a while. Your Plans for the Video Editing Computer Before you buy a video editing computer, consider the projects that you plan to create. If you only plan on editing basic videos using free software like Movie Maker or iMovie, most new computers out there have the right inputs and plenty of storage space to fit your needs. If you plan on editing with more powerful professional editing software, youll want a computer that gives you more processing power.

Free video editing software is an easy and convenient way to edit your videos, and is great for beginners. Most of the free video editing programs have limited editing features, so after a while you may want to look at the mid-level digital

video softwareor the top professional video editing programs. iMovie iMovie comes free with new Macs. iMovie offers many options for editing video and audio, and adding photos, music and narration to your movies. Movie Maker Movie Maker is Window's free video editing software, which comes installed on new PCs. Use the program to create and share high-quality movies. YouTube YouTube's video editor is an easy, free way to trim clips or remix videos. The editing power is limited, though, and you'll never get an uncompressed version of the final product. Pinnacle SpinVideo Spin, for PCs, is free video editing software from Pinnacle. Video Spin is specifically designed to take the complexity out of video editing, but it still includes tools, transitions and effects so you can easily jazz up your videos. Free Online Editing SoftwareBesides YouTube, there are several other web applications that provide free video editing online. These services are great for re-editing and re-mixing web videos, and some even offer to produce DVDs of your edited videos.