

NONLINEAR OFFLINE: ANECDOTES AND OPINIONS FROM A FACILITY OWNER'S PERSPECTIVE

BY CHRIS ALLAIN

I offer the following discourse to facility owners and editors not as an exhaustive analysis of technology or the features of a particular system, and not as a description of a new product or development. Rather, it is a discussion of nonlinear offline editing, my impressions of the Avid Media Composer, and an account of my experiences since acquiring the Avid system. To save you a trip to the "conclusions" section, I'll start by recommending the Avid Media Composer offline editing system.

In fact, to make this a truly nonlinear article, I'll start with my conclusions and the assumption that your time is valuable. If you've heard it all before and you know it's time to act, just read my

conclusion. If the details interest you, read further. I'll discuss a few thoughts relating to the issue of selecting a nonlinear offline system and illustrate my experiences by describing projects where we used the Avid. If you are a linear kind of person you may want to skip the next section for now and read it last.

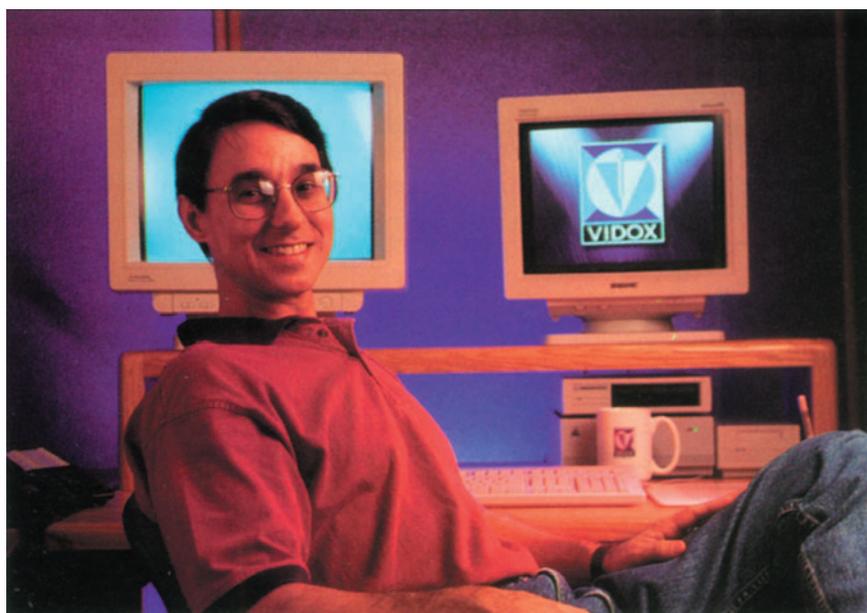
The Case for Nonlinear Offline and the Avid Media Composer

It's probably unnecessary for me to make a case for nonlinear offline systems now that they've established such a following, but not everyone is as yet convinced.

If you make your living as—or employ someone as—a video editor, and if you place a reasonably high

price on the man-hours spent editing, then I would suggest that you take the athletic shoe ad's advice and "just do it." Now let's move on to the other question, where there is room for argument. Which system should you choose? Perhaps the most compelling argument offered against the Avid is cost.

The lowest cost Media Composer, the 400S, retails for just under \$15,000, with the buyer supplying the computer, drives and monitors. The cost of these basic components without the nonlinear editing software and hardware does not vary much between systems or even between platforms. To evaluate price, then, we should look at the cost of the board set and software apart from the other components. That is essentially what the 400S is: software, boards, and cables. Viewed in this way the low-end 400S still looks pricey compared to many other systems. It certainly costs more than Adobe Premiere running on a Quadra 840AV, but it provides essentially the same software used on Avid's highest-end system. Avid offers a number of options to the basic system, but buyers still get Media Composer, arguably the finest software available for editing video and film pro-



The author in his Mac-based suite

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grams. Most production companies that own a Macintosh graphics system will not find it prohibitive to add the 400S package

A Discussion of the Issues of Non-linear Offline

I was baffled recently while reading another magazine. A video editor interviewed there, didn't find nonlinear offline systems to be a great time saver. He said that one merely spends more time refining a program with these systems. Doesn't that mean that in a pinch you can online a program faster that is not "more refined?"

The experience at my company, Vidox Image & Data, is that you edit faster and better. And when you return to a project to make changes—such as shortening an interview in the beginning of a 10-minute piece—you save even more time.

We now send out "proof" programs in Avid's AVR 2 quality level. Clients don't mind viewing video of this quality. They realize that the finished piece will look much better and like the ability to make changes economically. If you have a good method of archiving the digitized video and audio, you can restore, alter, and auto-assemble even old projects with ease. You can restore most projects easily even if you must redigitize the audio and video. Those who have read my articles may have deduced that I use Macs almost exclusively. I can only conclude that the unenthusiastic user described above edits on a less capable system than the Avid. I am not looking for a battle in the religious war of the operating systems, but the Avid delivers an eloquent testimonial to why the Macintosh has such a loyal following. This is not good software for a video product, this is great software by any standard.

Name brands carry weight in the video industry. Some consider it "snob appeal" but video professionals and their clients know and respect the Avid name. The name alone serves as a sales tool for a facility owner marketing his services

The Media Composer software has matured. Avid builds a stable and well-conceived system. The interface includes powerful, ingenious tools-enablers, that facilitate the aesthetic ordering of images and sounds into video programs. Avid borrows metaphors from both film and video editing and combines

The simple fact is that the Avid expedites completion of professional-quality video programming.

them into an interface pleasing to the eye and to the touch. Overall, the system provides what it promises without resistance. Whether you control machines, generate and export EDL lists, or export finished audio, it simply works. It is a complex solution but it performs reliably

Ironically, what some may consider a strength of the program seems to generate one of the most frequently heard complaints: complexity. The software's creators try to provide users with the metaphors and tools familiar to them. As a result, the software frequently offers several approaches to performing a function. Although this increases the learning curve, I doubt that most experienced users would give up customization for simplicity.

Other complaints do surface after a bit of time with the Media Composer. Two issues relate to launch time. The file system places its audio and video files into a media folder that the application

must open upon launch. As a result, composer takes a long time to launch with a large number of clips in the media folder [this feature has been improved in Version 5.2]. The application disables file-sharing (but not AppleTalk) when it launches because of the overhead of the active network. This situation frustrates a user trying to import graphics from another workstation. When you quit the application to restore the network for file copying, you must again wait through the slow application launch time. It would be a time saver if one could temporarily start up the network without quitting the application.

Another nuisance complicated by slow launch time is the systems requirement that you restart the program to recognize different source machines.

If you are digitizing video from a Betacam VTR and want to digitize audio from a DAT machine you must relaunch the software to have it properly recognize the new source. A console command called CHECK DECKS acts as a remote source manager

The finished quality digital audio provided by the configuration that we use saves time over building an audio work tape on a multitrack tape machine. Twenty-four tracks of digital audio, provided with the CD Quality Audio option, afford ample capacity for all the mixes we've had occasion to perform to date. Our program mix-downs have improved with the system and we enjoy the ability to transfer sound digitally to and from a DAT recorder. The Avid controls the editing VTR when recording the audio, frame-accurately, to the master video tape. It's not unusual for that audio to have remained digital until that point, and—needless to say—it sounds great.

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With just two tracks of input and output, the audio has proved to be a limitation of the system. If you wish to monitor more than two tracks you must build a mix. This doesn't take too long for a 30-second commercial, but can cause delays in longer programs. Also, the system lacks frequency equalization and dynamic-range compression, requiring these to be performed externally. This can sometimes be a hassle.

Note that these comments on audio relate specifically to our configuration. A basic 400S would offer no

finished audio and a top-of-the-8000 would provide more features.

A Comparison

Without question, other systems perform admirably. And although I have experience with several of

them, I won't say that I have personally done an exhaustive side-by-side comparison. I base my sense of the superiority of this product on my experience along with countless trade show conversations and journal articles I've read. I've experimented with Adobe Premiere, a product at the other end of the price spectrum. Before you criticize the comparison I'm about to make, let me acknowledge that the two systems have vastly different market positioning and performance. But I still think it's useful to contrast the two.

In many ways these two systems promise much the same thing. On paper, Adobe Premiere might seem to be a head-to-head competitor with the Avid offline system, especially with version 4.0, which improves performance substantially. Premiere can even complete projects with finished video quality

and complex layering and effects, something impossible with an offline Avid. But the reality is that most professional producers can't afford the time to work this way. Along with the price difference, there is a performance disparity for the basic cuts and dissolves editing that is the bread and butter of our trade. The simple fact is that the Avid expedites completion of professional-quality video programming. A user makes editorial decisions quickly on the Avid, while with Premiere, one labors through the process. This isn't due to some grand distinction, but to a number of small operational reasons. If we considered special effects, the story would be different, but remember, my comments regard editing.

Don't mistake this for Premiere-bashing. Premiere offers

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a beautifully designed interface, an astounding feature set, and a modest price. When it becomes more of a real-time product, it will likely compete with the Com poser software. I've barely worked with the newest version, Premiere 4.0, which adds many features and improves performance, but it still doesn't have the immediate interaction of the Avid. These new versions of Premiere and QuickTime improve the situation, but Premiere is still unlikely to increase a professional editor's productivity in basic editing. The Avid does.

Anecdote 1: The News Magazine

When we first received the Com poser system it was equipped with version 4.5 software, but 5.0 was about to ship (5.2 will be shipping

soon). We didn't want to waste time learning software that we'd replace shortly, so we used the system only once or twice before version 5.0 arrived.

The client felt that they had greater creative freedom.

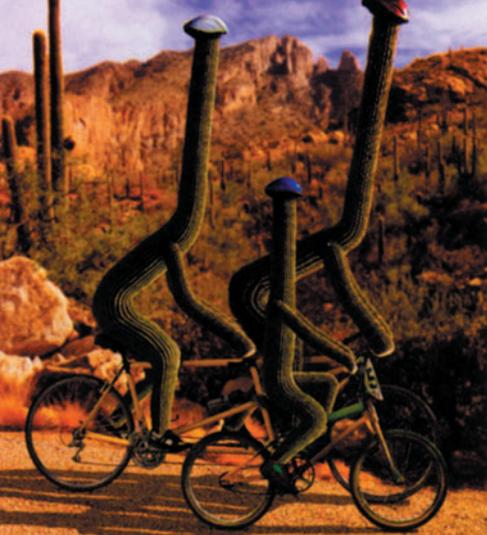
The day the new software version arrived we had a project due for the video Magazine The Next Step for Video Professionals. It was only a two-minute segment, so we thought we'd try to cut it on the Avid.

Starting at about 1:15 p.m., we loaded the software, set up control of a deck to digitize the clips, digitized and edited the video and audio, controlled a different brand

and model tape machine to layback the edited digital audio, exported an EDL to our online system, and auto-assembled the master. The edited program comfortably made Federal Express that evening.

From my experience I'd say that this is a remarkable story for two reasons. For one, we were able to install and operate this software adequately to complete a program in a matter of a couple of hours. For another, we were able to interface the Avid to three other devices without a problem. The EDL imported into our edit controller without a hitch, and the Avid flawlessly controlled both of the tape machines to which it interfaced. I've interfaced all sorts of VTRs to a number of different machine controllers, but never has

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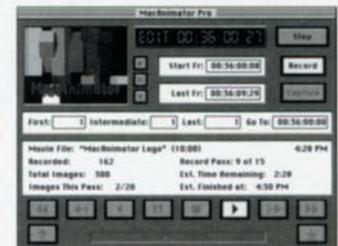
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Anecdote 2: The Retailers Commercial

The second project I'll relate took place a few weeks after we began using version 5.0 of the software. We had used the Avid on a couple of small projects and were aware of most of the features at this point, but hadn't yet developed proficiency.

The client, a retailer, has adopted an unusual style of creating commercials. They shoot as much product as possible in a long, looseley planned day, and then edit online for a day or two to create as many commercials as possible. Low budget commercials in small markets are usually not offlined. The online edit sessions had typically run about a day and a half and yielded about four or five spots.

Although they were not accustomed to working this way, we gave the client a VHS window dub of the field footage and requested they timecode numbers of their picks be faxed to us the day before. With over 60 minutes of field footage, and about 50 clips it took nearly two hours to enter and digitize the takes. We charge a lower hourly rate for data entry and digitizing.

When they arrived for a 9 a.m. session we began editing. We created some of the graphics in advance, but we created others during the session. When they left at 1 p.m. we had edited the four spots they had hoped to finish and one extra they had not planned. We accomplished this despite going back to the field tapes several times to digitize additional shots.

One of the spots involved a complex edit to a music track. We edited to the music "hits" with ease. As tightly edited as this spot

was, it alone probably could have taken four hours in a traditional suite. Changes would have been out of the question. The clients felt that they had greater creative freedom, and had completed the work in a quarter of the time they'd spent previously.

The client left with the AVR 2 Avid cut to get final approval. Later that afternoon we received approval on the spots. The online autoassembly took about one hour and the dubs were on the front counter before 5 p.m.

Anecdote 3: The Industrial Video

We perhaps get the most joy out of using the Avid when editing industrials. These programs take

It became clear to us that installing an Avid Media Composer was one of the best business decisions we had ever made.

a long time to edit, and shortening the process by two thirds pleases editors and clients alike. Also, you can

maintain editorial quality more easily with a nonlinear system. ("Didn't we use that shot before? Won't this be confusing if we don't show the other shot first?") You're more likely to ask the "what ifs" when you can answer them painlessly.

One industrial project comes to mind where the Avid made a huge difference in the quality of the piece. The program, describing an oil field service provided with heavy equipment, ran about ten minutes. The producer came to us with footage already shot. We digitized most of the video before the session began but otherwise the production was not in a very organized state.

The audio was to come completely from on-camera sound bytes with the principals of the company. For the first time in the history of industrial video, the company CEO was not very articulate. He inserted a long pause or a guttural "uhhh" seemingly between each pair of words.

If we had edited this program without extracting the pauses and tightening up the sound bytes, the piece may have lasted minutes longer. Not only would this have been too long for the piece, but it would likely have embarrassed the company rather than promoted it.

What we did next we would never have attempted on any traditional system. Once we'd edited the complete sound byte bed, and we realized that we had to fix it, we began. This is where the Avid's digital audio workstation (DAW) capability came into play. The fix involved removing stutters, phrases, and pauses. It even involved some sentence building/cutting and pasting parts of other sentences to improve continuity and complete thoughts. The audio track on the timeline showed so many edits that it was hard to find a sustained block of audio. Next, we selected B-roll footage to cover the edited bytes where the speaker was on camera.

If the producer had edited this in a traditional suite, the program would probably have been awful. If an editor using a linear system had attempted to do what we did, it would have taken a week, if he could have done it at all. The final program, as we edited it, was really not that bad, and it took us only one 12-hour day to complete.

Very early on it became clear to us that installing an Avid Media Composer was one of the best business decisions we had ever made.