



## Preparing for a Professional Online Edit

Having your project online edited by a professional editor adds a level of polish that is difficult to replicate yourself, but that quality comes at a price. Most online sessions start at around \$500 an hour. Depending on the number of edits in your project, an online session for a 90-minute feature could take four or five days, maybe more if you have lots of effects. If you're new to the world of high-end video, the expense and the atmosphere might be a bit daunting. As with any part of the filmmaking process, don't be afraid to ask questions. Remember that only the inexperienced refrain from asking questions. The more experienced you are, the more questions you'll have.

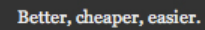
## Making the Calls

First, you need to find a facility that's right for you. If your project is DV, DVCAM, or DVCPro, make sure that your facility can online directly from that format. A surprising number of post houses do not yet have DV equipment. Instead, they will probably offer to "bump up" your DV tapes to BetaSP (just say no!) or Digital Betacam (expensive and unnecessary). Instead, go with a house that's DV-friendly.

You also want to determine how many source decks are dedicated to your session. The more source decks you have at your disposal (you should have a minimum of two), the faster you can finish—one deck can be cueing up a tape while the other is in use. Next, you need to determine what your mastering format will be. If you're spending the money for an online session, you should make it worth your while and master to a high-quality digital format such as Digital Betacam or D1. You should also arrange for a clone of your master—also known as a *protection copy*—once it is completed. If something goes wrong to your master, or if you sell your project, you'll still have a high-quality copy for yourself.

## Stripping Down Your Sequence

You'll have to take an EDL to your online session, and to output a good EDL, you'll need to prepare your edited project. Make a copy of the project and remove all of the elements that don't need to be there for the online session—temporary titles and effects, music, voice-overs, and so forth—from the copy (Figure 18.2). All that should remain is the video and audio that came from your timecoded source tapes, including special effects shots that you created and mastered onto videotape. You should make sure that all of your video is on a single track.



**Figure 18.02 A timeline view of a locked edited sequence and the same edit stripped of all unnecessary elements.**



## Hour 01:00:00:00

Make sure that the first frame of your edited sequence starts at 01:00:00:00. Although it isn't crucial, it's standard for video masters and outputs to start at hour one. Things will go smoother (i.e., faster) at the post facility if you follow the norm. If your project is broken down into film reels, it's customary to start Reel 1 at hour one, Reel 2 at hour two, and so on.

Your goal in an online session is to get your video laid down correctly. You'll polish and correct the audio later, when you mix your sound. That said, you don't need to put any audio in your EDL if the DigiBeta or D1 master isn't going to be the source for the sync audio in your mix (Read the section "The Final Audio Mix" later in this chapter if you're not sure how you'll be mixing your audio.) If you want to add the sync audio during your online session, *checkerboard* it across three tracks. The fourth audio track should be left empty to save room for a *guide track* (see "Guide Tracks," later in this chapter). Professional videotape formats have four channels of audio, so even if you don't want a guide track, you'll have to make sure your audio is limited to four tracks (Figure 18.2).

## The List

After you've stripped your project down to its online essentials, you'll be ready to create an edit decision list, or EDL. You'll create the EDL in your editing application and take it to the online facility along with your source tapes. Before you make your EDL, it's important to talk to the post facility to find out exactly how they need the EDL formatted. Here's a list of things to ask about:

**EDL type:** Different types of linear editing hardware need different EDLs. The most common format is CMX 3600, which is considered the default nowadays. If your editing software doesn't offer any options for EDL formats, it's probably generating a CMX 3600 EDL. Other popular formats include Sony, GVG, and Axial. Ask your post house what type they need.

**Disk type:** Most linear editing systems cannot read PC or Mac formatted disks; instead, they use another format, called RT11. To format an RT11 disk on a PC or a Mac, you'll need an *unformatted* 3.5" floppy and a software utility that can format RT11 disks, such as Avid's EDL Manager. If you can't create an RT11 disk on your system, make sure the online facility knows you'll be bringing a disk in another format and that you'll need transfer time before your \$500+/hr online session starts.

**Sort mode:** The edits in your list can be sorted in several different ways, depending on the needs of your project, and the requirements of the online facility. *A-mode* is the most common and easiest to understand. A-mode EDLs are sorted in terms of master record-in. In other words, your edits will be performed in a linear manner,



from start to finish. This is the simplest and most intuitive way to go, but often *C-mode* is a better choice. C-mode EDLs are sorted by source tape number, and then by master record-in. With C-mode, the online editor starts with the lowest tape number and sets the video levels for that source tape. Then, all the shots from that reel are edited onto the master. The same procedure is followed for the next source tape, and so on. Say you have 20 source reels and 650 video edits in your list. With A-mode, the online editor will have to set the video levels up to 650 times; with C-mode, he'll need to set up as little as 20 times. Other sort modes include B-, D-, and E-modes, which are rarely used for long-format projects. Figure 18.3 shows a short EDL sorted in A-mode and C-mode.

Event	Tape I.D.		Source In	Source Out	Master In	Master Out
001	005285	V C	17:09:22:20	17:09:23:14	01:05:11:10	01:05:12:04
002	005287	V C	19:22:55:18	19:23:00:29	01:05:12:04	01:05:17:13
003	005286	V C	18:23:50:17	18:23:58:17	01:05:17:13	01:05:25:13
004	005285	V C	17:28:50:16	17:28:51:15	01:05:25:13	01:05:25:12

**A-mode EDL**      Tracks selected (in this case video only)

001	005285	V C	17:09:22:20	17:09:23:14	01:05:11:10	01:05:12:04
002	005285	V C	17:28:50:16	17:28:51:15	01:05:25:13	01:05:25:12
003	005286	V C	18:23:50:17	18:23:58:17	01:05:17:13	01:05:25:13
004	005287	V C	19:22:55:18	19:23:00:29	01:05:12:04	01:05:17:13

**C-mode EDL**

Figure 18.3 EDL sort modes

**Number of events:** Depending on your EDL type, you might be limited to 800 or 1000 lines of text per EDL. Since each edit, also known as an *event*, takes up at least one line of text in an EDL, if your project has more than 800 edits, it's best to break it into two EDLs. Make this cut at a hard edit somewhere in the middle of your project.

**Track selection:** You'll need to decide which tracks to include in your EDL. Usually, this will be one track of video and the sync audio that goes with it. Remember that videotapes can only have four tracks of audio and one track of video.

**Optimizing your EDL:** Usually, this is done by the post facility. They'll go through your EDL and make sure there aren't any unnecessary edits in the list, a process known as *list cleaning*. Unless you thoroughly understand the EDL process and the equipment involved, this is best left to the experts.



**Comments:** Most NLEs allow you to add comments to your EDL—you can add notes to the online editor, tape names, clip names, and other information. Usually, the list you give to the post house should not have any more text than is absolutely necessary, due to the aforementioned number-of-events limitation. Instead, you should create a secondary EDL with comments that you print out for yourself and other human readers.

**Pre-reading and b-reels:** If you want to dissolve between two shots on the same source tape, this will be accomplished using pre-read edits or a b-reel. To create a dissolve, linear editing systems need to be able to play the a-side of the dissolve and the b-side of the dissolve simultaneously. A linear editing system with pre-read capability is able to store the frames contained in the b-side of the dissolve in memory. If this option isn't available, you'll need to create a "b-reel"—a new source tape with all the b-sides of dissolves that occur on the same source tapes. You can do this yourself (\$), or have the post facility do it for you (\$\$).

**Digital Video Effects (DVEs):** Unless you have very deep pockets, an online session is not the place to deal with complicated special effects. However, if you do plan to do anything more than a simple dissolve in your online session, you'll need to order special DVE equipment for your session.

## EDLs and Effects

EDLs can be rather limited when it comes to information about digital video effects. While motion effects, dissolves, color effects, and resizing are commonly included in an EDL, you should check with your post-production facility before assuming that their equipment can *automatically* recreate these effects. Typically, you will be limited to dissolves, 20 standard wipes (all of which you'll probably hate), and one static superimposition track (think "1980s news graphics").

Anything more complicated will have to be recreated by the online editor. In addition, if you have motion effects in your sequence, you need to make sure that you've used a frame rate that the linear-editing hardware supports. Ask the post house to send you a list of acceptable frame rates and/or percentages.

## Guide Tracks

To avoid confusion during the online session, it's a good idea to create an *audio guide track* that will serve as a guide while you are editing. If you place a copy of the audio from your final edit onto one of the audio tracks on the tape you will be onlineing onto, you will have an audible reference that will help ensure that your edits are correct, and in-sync. Audio guide tracks are especially useful if you're doing a C-mode online, or editing video only.

Before your online session, do an output of your final edit (not the stripped-down version!) with mixed audio onto a timecoded video source, preferably BetaSP or a DV





format. Have the post facility record a track from your mixed audio output onto one of the four audio tracks on your DigiBeta or D1 master. Remember that this is usually a real-time process, so you'll want them to do it overnight to have it ready for your session.

Some people also like to have a visual guide, which can be created by recording the video from your output onto the DigiBeta or D1 master. During the online session, the guide video is covered up by the high-quality online video. Usually, the quality difference is large enough that it's easy to determine what's old and what's new. However, tracking down a missed shot or a flash frame is much harder with guide video than with a black master tape. We recommend that you use an audio guide only. Whatever your preference, be sure to let the post facility know what you want in advance—some will automatically create a video and audio guide, others won't.

## Supervising the Online Session

As a director or editor supervising an online session, your goal is to make sure your final master looks as you intended it to look. For example, you might have a scene that was intentionally shot with unnaturally blue levels. Unless you are there to tell them otherwise, the online editor will probably try to correct this "problem" by taking down the blue. Most projects will include situations such as this so it's important that you sit in on the session.

You should arrive at the session with a printed version of your EDL containing comments, source names, and clip names. If you find the EDL confusing to read, spend some time at your NLE learning to interpret and understand where each scene begins and ends on the printout. You should also "spot" your film for scenes that have technical problems such as bad color or drop-outs. All of these things should be noted on your printed EDL. Make a photocopy of your EDL and notes for the online editor.

Your secondary goal when supervising an online session is to make sure it doesn't take too long. Two heads might be better than one, but they can also waste a lot of time chatting, discussing the merits of leaving the scene blue or correcting it, and so on. Let the online editor stay focused, and avoid talking and interrupting too much. Just because you're sitting there doing nothing doesn't mean they aren't busy setting video levels and managing your list. On the other hand, you are not expected to pay for "downtime." If there are technical problems (that aren't *your* fault), or if the online editor makes an error, pay attention to how much time it took and make a note of it. These things are inevitable, and most online editors will be taking notes of such things themselves. At the end of each day, they'll have you sign a type of invoice—be prepared to negotiate over lost time and technical problems.

### Semi-Supervised Online Sessions

Save time and money by doing an overnight, unsupervised, C-mode online edit, and then spend the next day or two going over your project in a supervised session to fix any errors, or drop-outs, and to add special effects.



## Color Correction and Titling Sessions

After you have your online master, it's common to spend half a day doing an additional color correction pass. High-end digital color correction systems, like Avid Symphony, offer a level of control that isn't available to the online editor. Usually, the color correctionist aims to make skin tones look their best. Nowadays, it's also common to add a "film look" effect to the entire piece.

If you haven't already had titles created by a motion graphics artist, you'll spend a few hours creating titles at the end of your online session. It's always a good idea to have a clone made of your color-corrected master before you add titles. This *textless master* will be the master for foreign dubbed and subtitled versions. Moreover, if you're transferring to 35mm, it's better to transfer the textless master to negative and have film resolution titles added later, separately. Typically, the titles you'll do at this point will consist simply of the end credit roll. Be prepared to provide a proofread text file of your credit list on a floppy. If your film is a documentary, you might need to add some *lower thirds* (see Chapter 17, "Titling and Simple Compositing"). If you need a subtitled master, you'll have a clone made of your master and provide a text file with all your subtitles on it. Usually, you'll want to go to a facility that specializes in su-titling.

Now you're ready to finish the audio. Audio outputs and mixes are covered in "The Final Audio Mix" section of this chapter.