Boris AAF Transfer White Paper

In an ideal world, an editor should be able move a project or a sequence between any two nonlinear edit applications. It would be great to have the edits, the media and any applied effects show up the same way in each. As we all know, that's not the case. The Advanced Authoring Format (AAF) was the industry's attempt to initiate such interoperability. Unfortunately, AAF has not enjoyed universal acceptance, and even participating companies are permitted to keep a segment of their metadata inside an AAF file "dark". This means certain information, like effects parameters, can't be read by another company's product. Two other timeline transfer methods – EDL (edit decision list) and XML (extensible markup language) files – are open alternatives to AAF, but normally carry limited metadata.

We no longer work in a world were a single nonlinear editing system is dominant, so the need for effective timeline transfer is greater than ever before. One of the biggest areas of interchange is between Apple Final Cut Pro and Avid Media Composer editors. Often a producer will start a project independently on Final Cut and then transition along the way to a post facility, which may be built around Avid solutions. To make this transition painless, Boris FX has introduced Boris AAF Transfer, a set of import and export plug-ins for Apple Final Cut Pro, which enables timeline interchange between Avid Media Composer/Symphony/NewsCutter/DS and Apple Final Cut Pro.

Boris FX is a leading developer of visual effects plug-ins for a variety of host systems, so the edge they bring to Boris AAF Transfer is the ability to transfer a much wider range of timeline effects. This specifically centers on the Boris Continuum Complete filters, which are correctly translated between Final Cut Pro and Media Composer. If the originating system used BCC filters, then the target system will correctly interpret these effects, as long as a set of BCC filters is also installed.
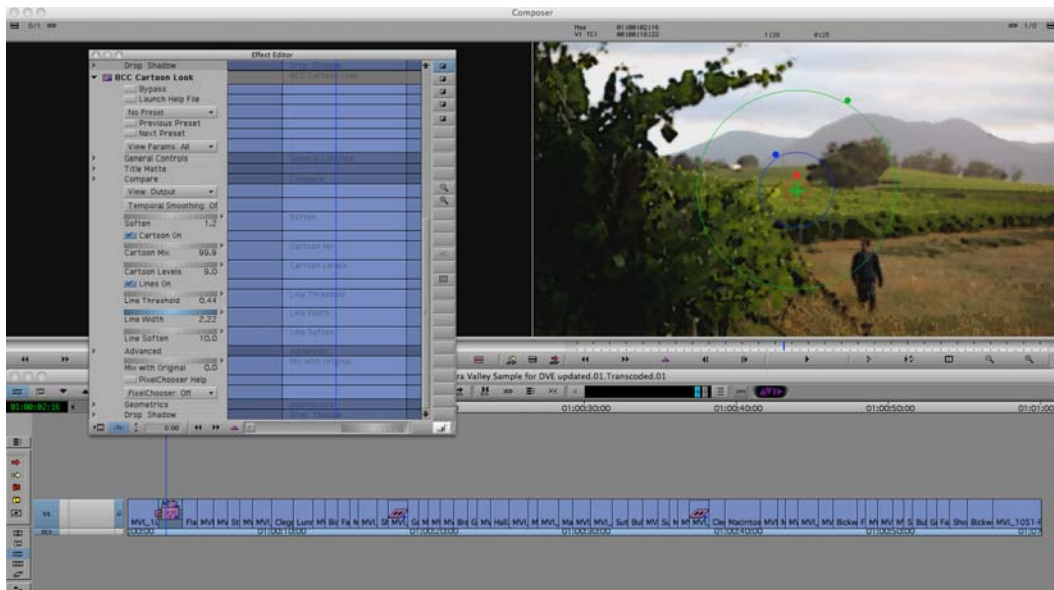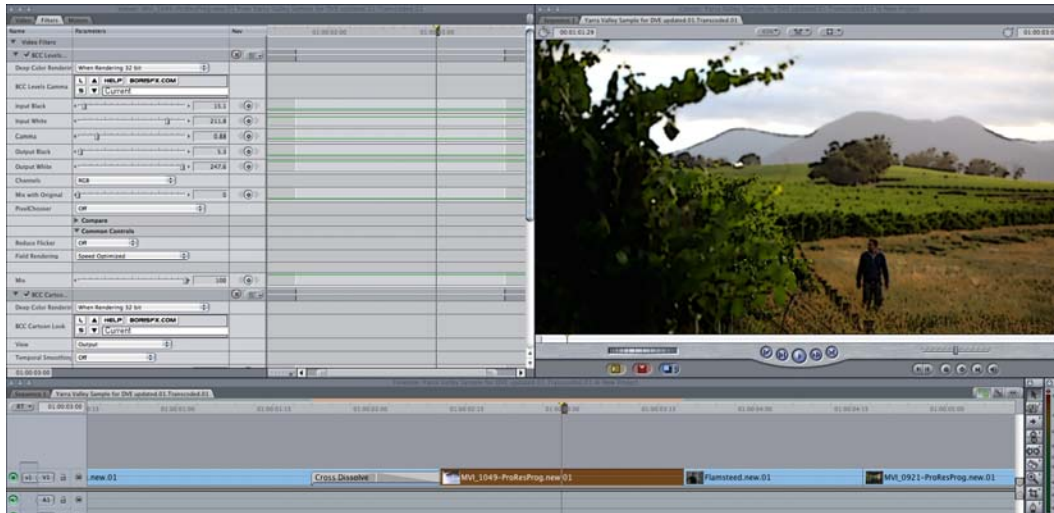
Timeline transfer needs have changed with the move from tape-based to file-based media. In the past, you simply needed to carry across reel and timecode information, since the target NLE would have to recapture the media clips from videotape anyway. That's no longer the case and users expect both of these leading NLEs to be able to read each other's media files. To that end, Avid has implemented Avid Media Access (AMA) – a plug-in architecture to import various native camera media formats, as well as professional QuickTime codecs. Likewise, Final Cut editors can access media in Avid's native MXF format, when additional software, such as Calibrated{Q} or MXF4mac products, are installed.

Through continued development, Boris AAF Transfer (now at version 2.0.8) is able to move sequences successfully between systems, regardless of whether the media was originally acquired from videotape or tapeless cameras. File-based production is increasingly the norm, so this is a major step forward. For example, if a producer recorded a project with a Canon EOS 5D Mark II or an ARRI ALEXA, the QuickTime files from either of these cameras could be directly accessed by and edited with either Avid Media Composer (version 5.0 or higher) or Apple Final Cut Pro (version 6.0 or 7.0).

An edit originally done in Avid Media Composer can be exported as an AAF file with the sequence linked to the media. The files don't need to be transcoded or embedded. This AAF file would then be imported into Final Cut Pro using the Boris AAF Transfer import plug-in. The original camera media files would be relinked during the import stage. If the edit workflow goes in the other direction – cut first with FCP and then move to Media Composer – the editor would export an AAF file from Final Cut using the Boris AAF Transfer export plug-in. This file, in turn, would be imported into Media Composer and the source media files relinked using AMA file import and Avid's relinking procedures.
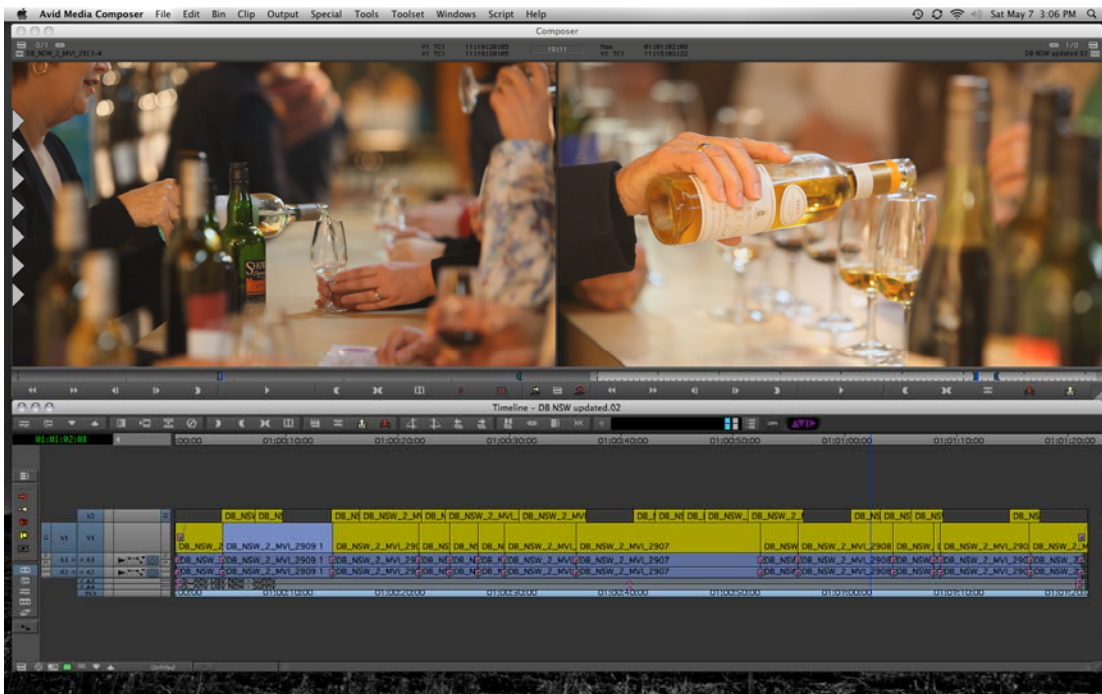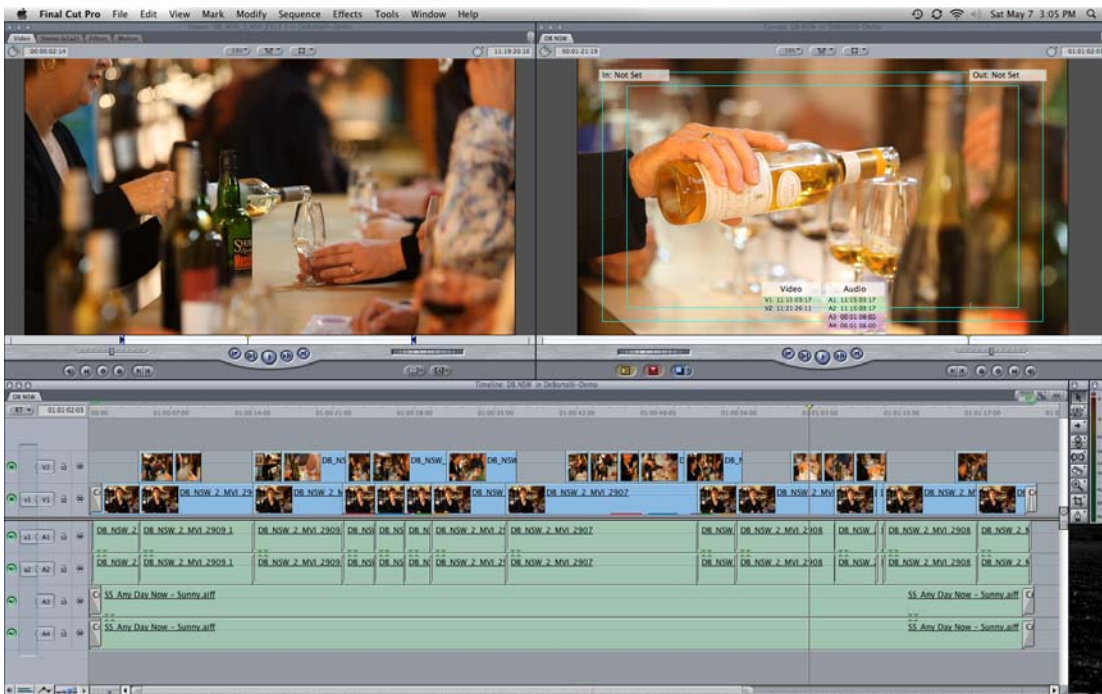
In either of these transfers, many native effects, like speed changes, dissolves, etc. would be interpreted, but more importantly, nearly all Boris Continuum Complete filters would be translated. The limitation is that these have to be filters common to both systems. For example, the group of BCS (Boris Continuum Shaders) filters in Final Cut Pro and the RT effects group in Media Composer are specific to the respective FxPlug and AVX architectures and won't come across. Likewise, the BCC7 3-way Color Grade filter available in FCP uses a custom interface that isn't

compatible with Avid AVX and will not be transferred. With these few exceptions, the bulk of the BCC package has direct equivalents in each of the two host NLEs.

The effects metadata is transferred between systems by maintaining filter parameter values, but Avid and Apple each use different display color spaces. Setting a value for video levels that looks right in one interface may require some tweaking to look correct inside the other NLE's interface. The amount of adjustment will vary based on the type of media and the look you are going after. More importantly, your sequence is at a very good starting point without the need to completely rebuild effects from scratch.
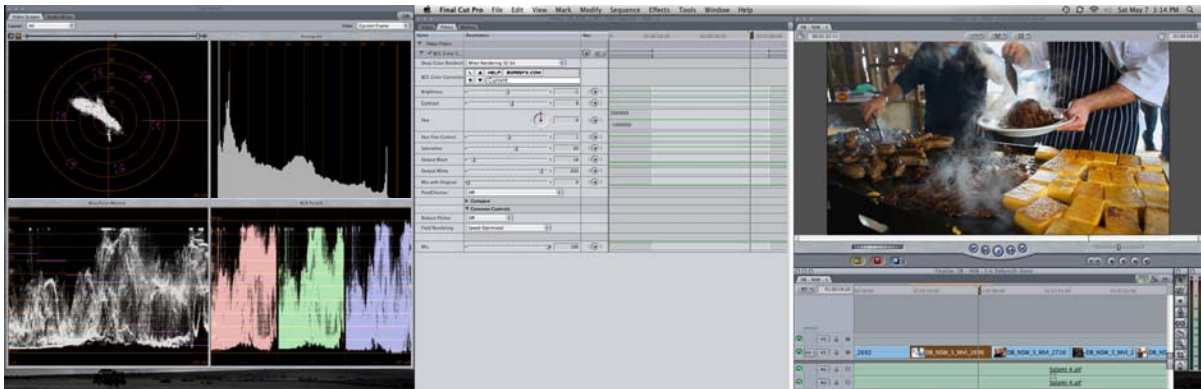
Many offline editors are tasked to build rough cuts that are as close to a finished look as possible. This requires a greater use of effects during the offline editing phase than in the past. Naturally, the Boris Continuum Complete filters are a great option for editors, because they are available for so many different hosts. For this reason, it is very important to maintain effects integrity between the offline and online NLEs. This has always been easy when going from Avid Media Composer to Avid Symphony, but now that same flexibility is available between Apple Final Cut Pro and Avid Media Composer and/or Symphony systems, thanks to Boris AAF Transfer.

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