

APPLICATION NOTE

EDIUS 7 4K COLOR CORRECTION WORKFLOW WITH RED & DAVINCI RESOLVE

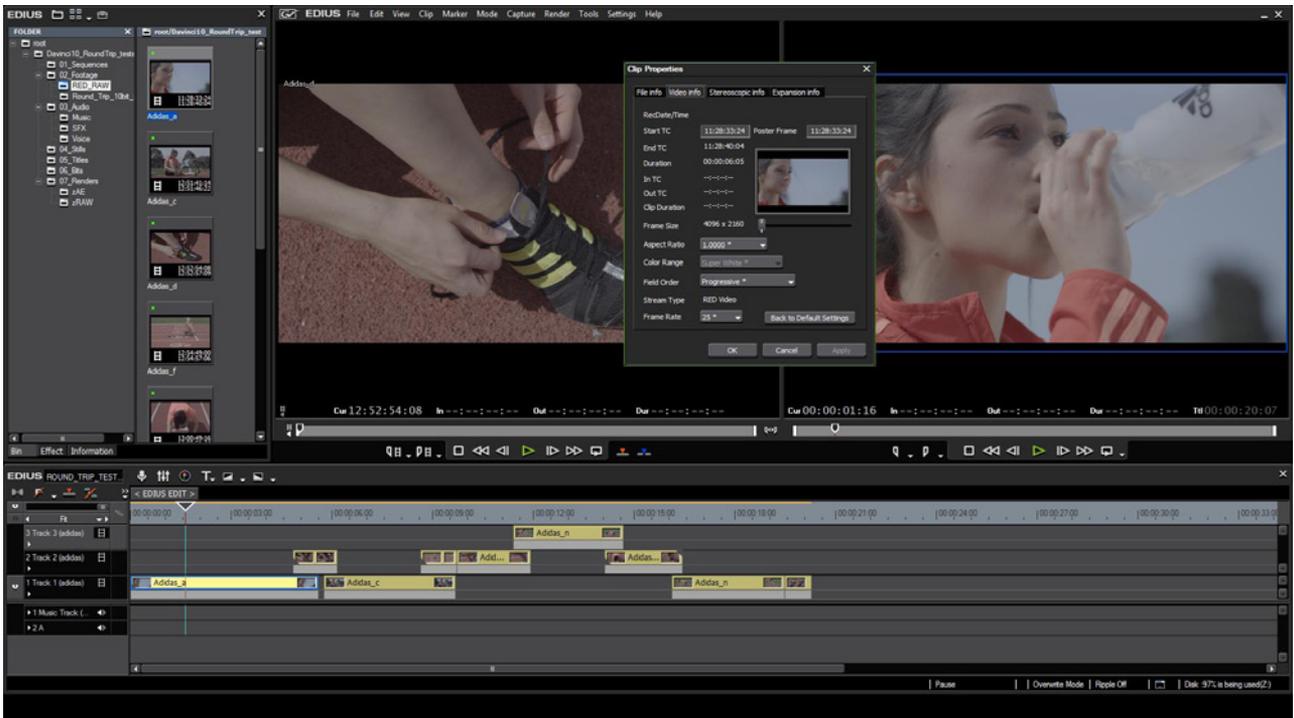
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October 2013



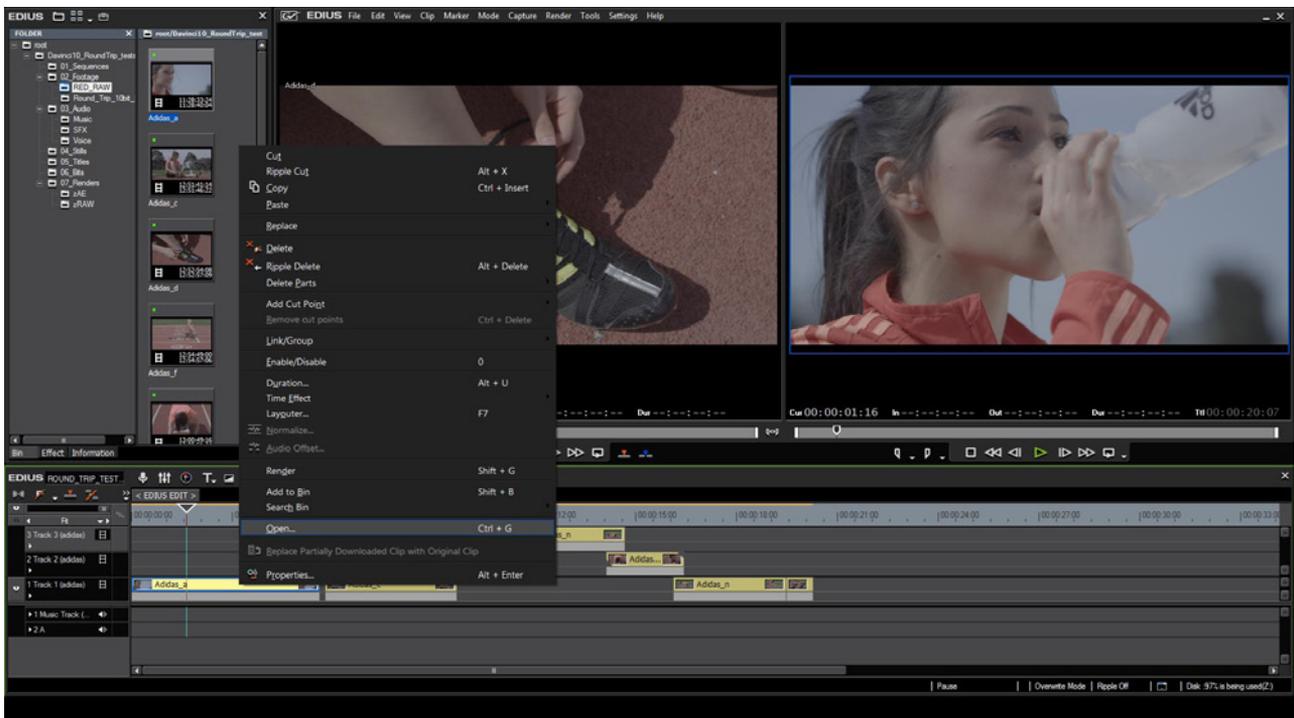
Although Grass Valley® EDIUS® has its own extremely powerful 10-bit color correction tools, if you want to edit RAW data from a RED camera in 16-bit color space and work with DaVinci Resolve to color grade it, just follow this simple, 10-step guide.

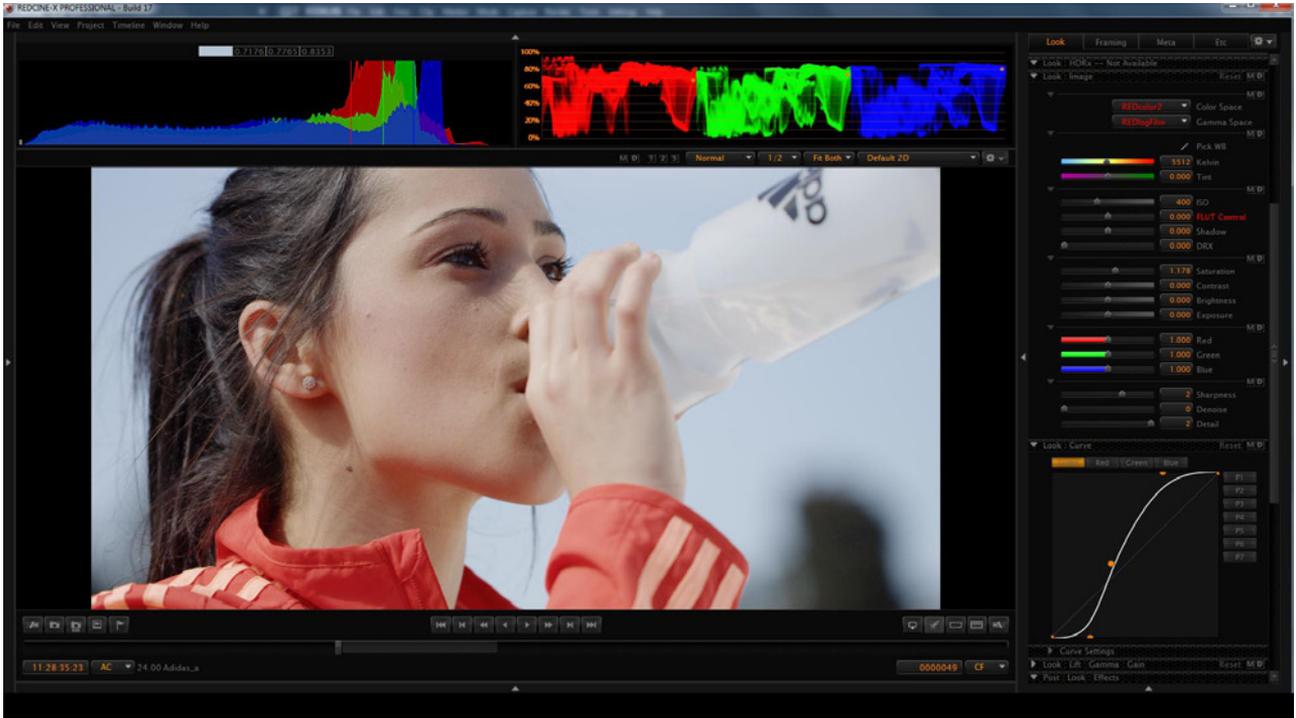


1 Importing 4K RED footage in its native RAW format is quick and easy with EDIUS. Just like any video format, import your clips into the bin. To import multiple clips or folders of clips at once, right-click in the left pane of the bin and choose [Open], then search for the folder that contains your footage and select [Open].

By default, RED cameras record each clip to a separate folder. Once the footage has been imported, right-click on the root directory of your clips in the bin and choose [Search] > [Clip Type] > [Add] and press OK. This will create a new folder in the bin which organizes all of your footage into one place. You can also rename this folder by right-clicking on it.

Note: Make sure the frame rate in the project settings matches the frame rate of the footage, and if you would like to use DaVinci Resolve's LITE version, you also must work in 4K ULTRA HD (3840x2160) resolution.





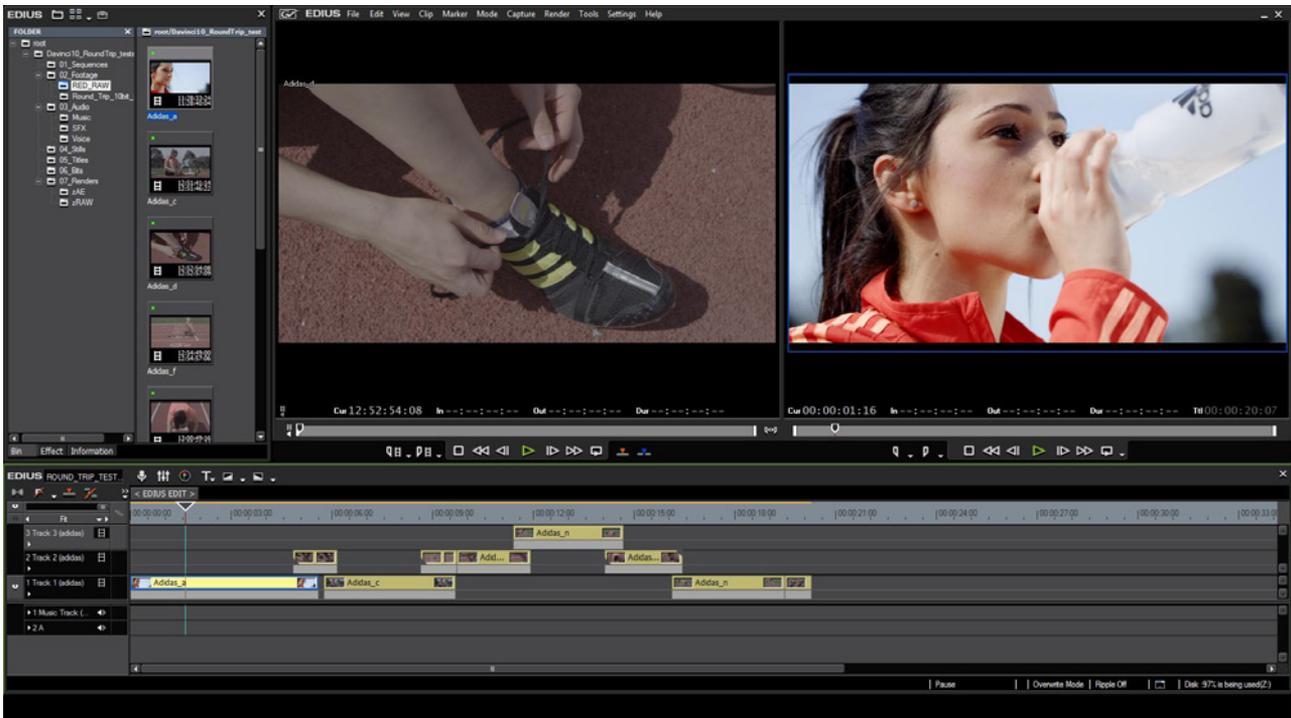
2 Editing RED's 4K RAW footage is possible in real-time within EDIUS. This happens without the need to transcode to Grass Valley HQX or any other intermediate codec, enabling you to maintain maximum detail and flexibility with color correction.

Once you have finished editing, you are now ready to do a base grade of the raw material (adjust contrast, saturation, and white balance in RAW). Instead of using EDIUS's color correction tools to do this, EDIUS now seamlessly works with REDCINE-X PRO (RED's free RAW processing software – you can download it here: www.red.com/downloads), allowing you to access the RAW metadata in a 16-bit color space.

To do this, right-click on a clip in the timeline and select [Open]. This automatically opens and links REDCINE-X PRO to EDIUS and that clip. You can also map a keyboard shortcut to this function to speed things up. Depending on your system specs, you may want to lower the proxy resolution of the RED codec by going to [Settings] > [System Settings] > [Importer] > [RED]. This can be switched to any resolution at any time.

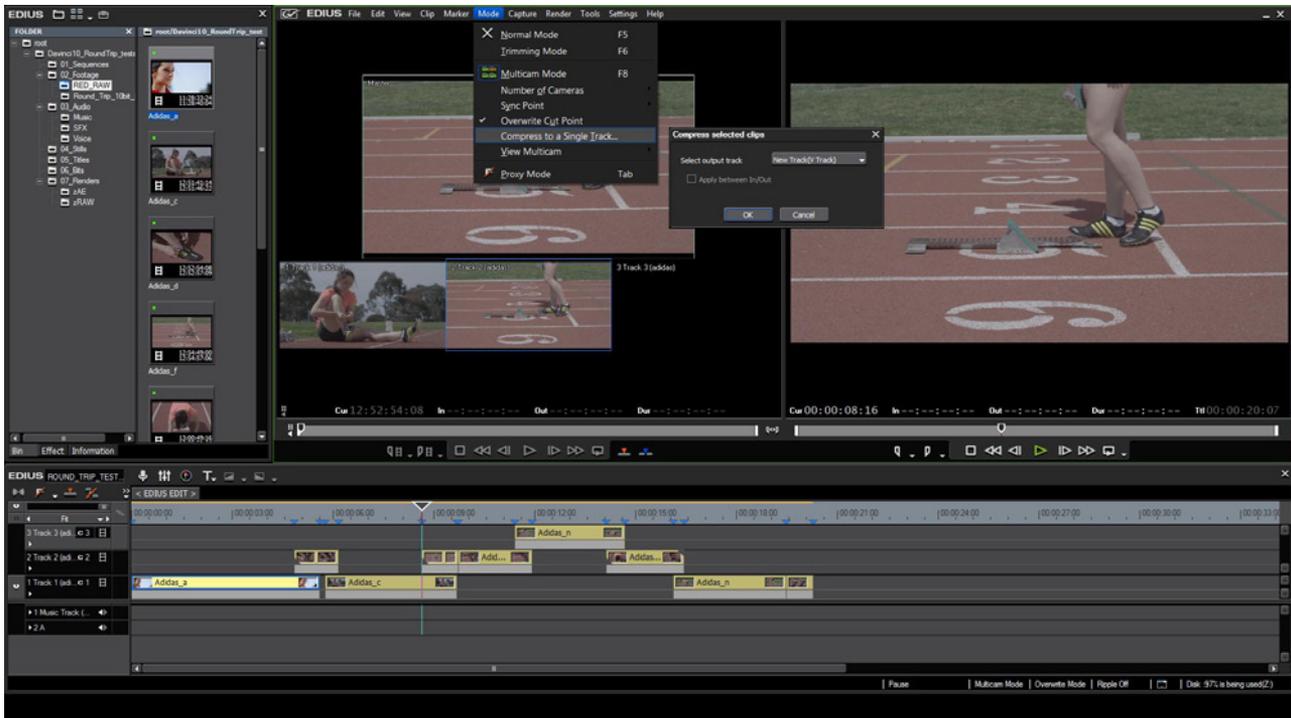
3 Color correction changes done in REDCINE -X PRO are instantly updated within EDIUS. Switching back and forth using the

Windows shortcut, Alt+Tab, allows you to work quickly between both software packages, almost as if they were one.



4 Once the base grade is done and you're happy with the edit, it's time to begin your final master color correction session. We are going to export this timeline to DaVinci Resolve LITE (free software from Blackmagic Design). If you have multiple video tracks, you will need to compress them to one. A quick and easy way

to do this is to change the editing mode in EDIUS to [Multicam Mode]. Pressing F8 or going to [Mode] > [Multicam Mode] allows editing of multiple video layers at once, however we are going to use the function of this mode called [Compress to a Single Track], which you will find under [Mode].

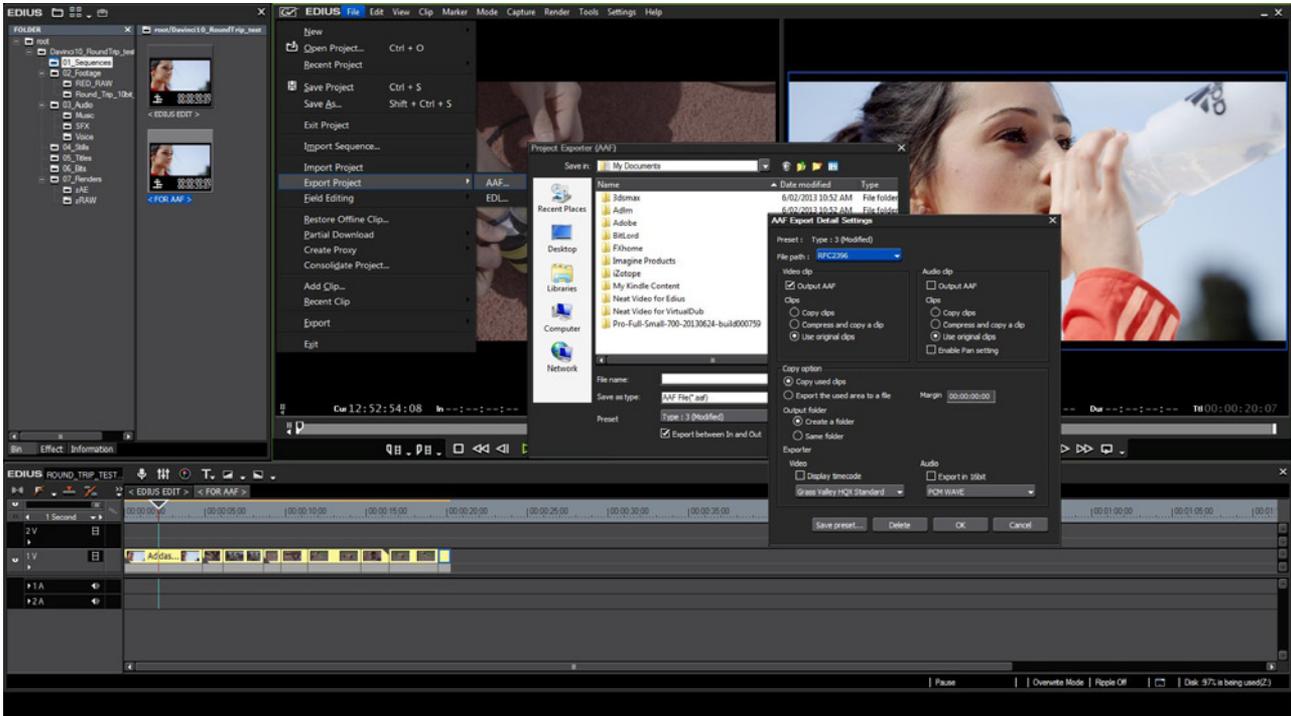




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Once you have your edit compressed to a single track, copy and paste that track into a new sequence and label the sequence something like "EDIUS AAF" or "READY FOR RESOLVE."

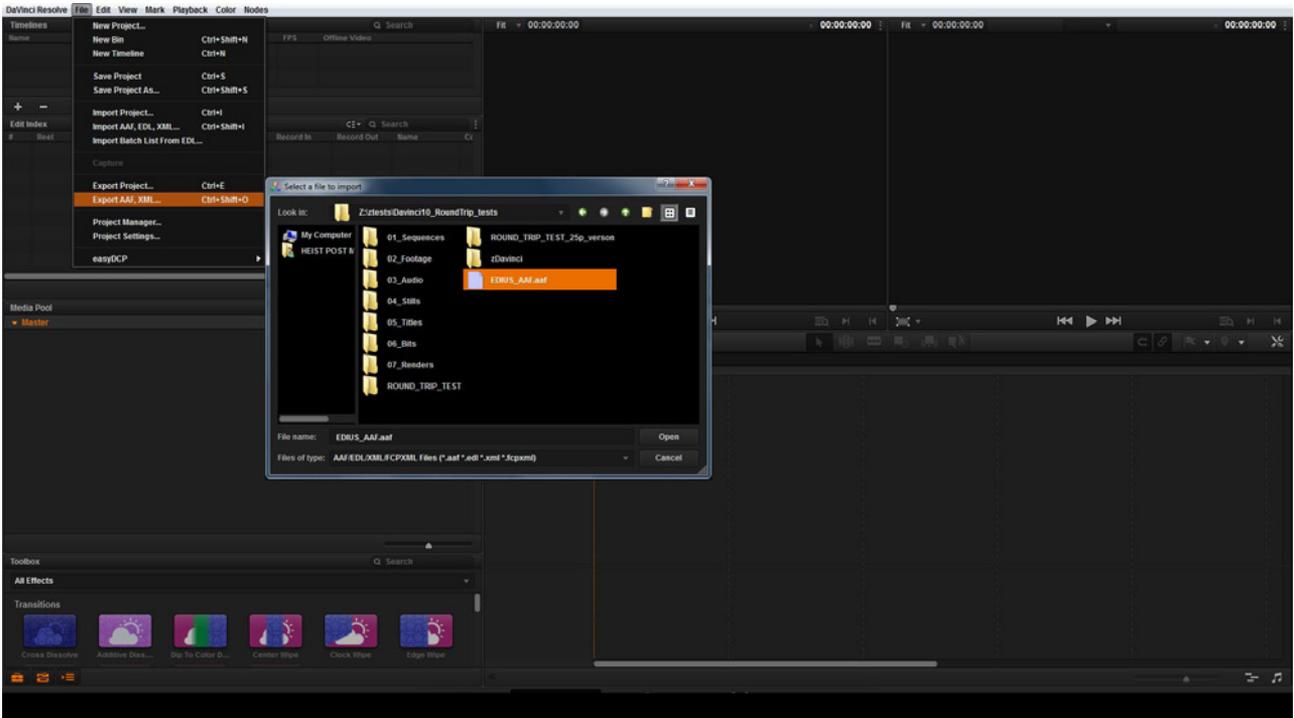




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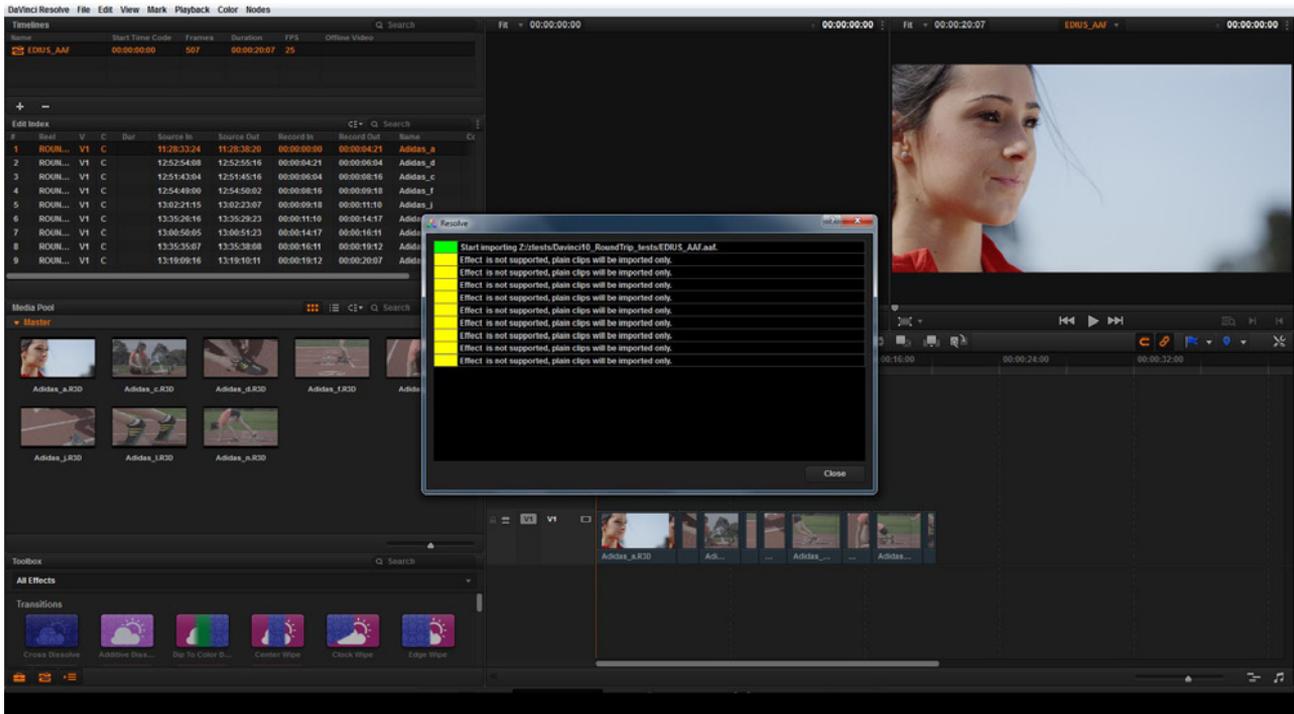
To export the timeline in a format that DaVinci Resolve understands, go to [File] > [Export Project] > [AAF]. Export AAF Type 3, RFC2396. For VIDEO check [Output AAF] and [Use

original clips], for AUDIO leave all unchecked. The copy option does not matter because we have already told EDIUS to use the original clips.



7 Open DaVinci Resolve LITE, create a new project, go to the [EDIT] tab (second on the bottom) and then choose [File] > [Import AAF, EDL, XML...], and locate your AAF file that we created in EDIUS and click [Open]. Leave all the settings as they are and press [OK].

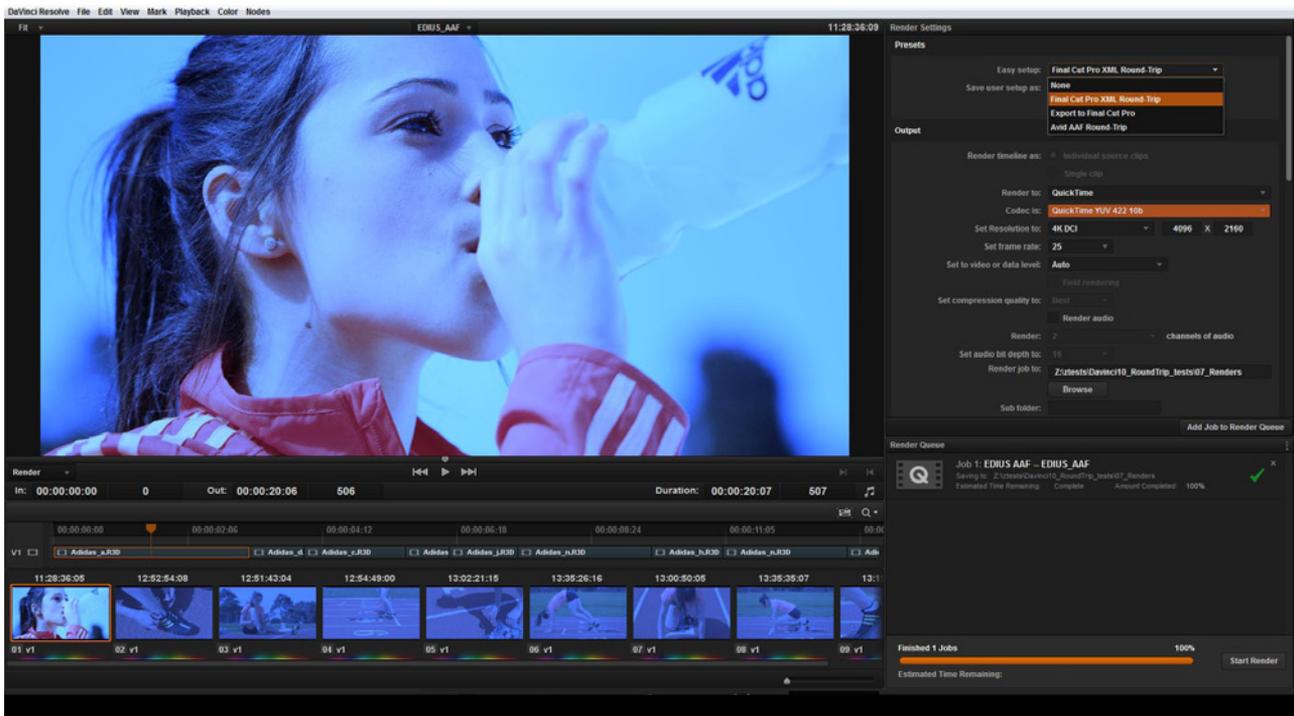
Note: Don't worry about the error message that comes up stating that effects are not supported, etc. Your timeline is intact and identical to your EDIUS timeline with the original clips, ready for coloring!

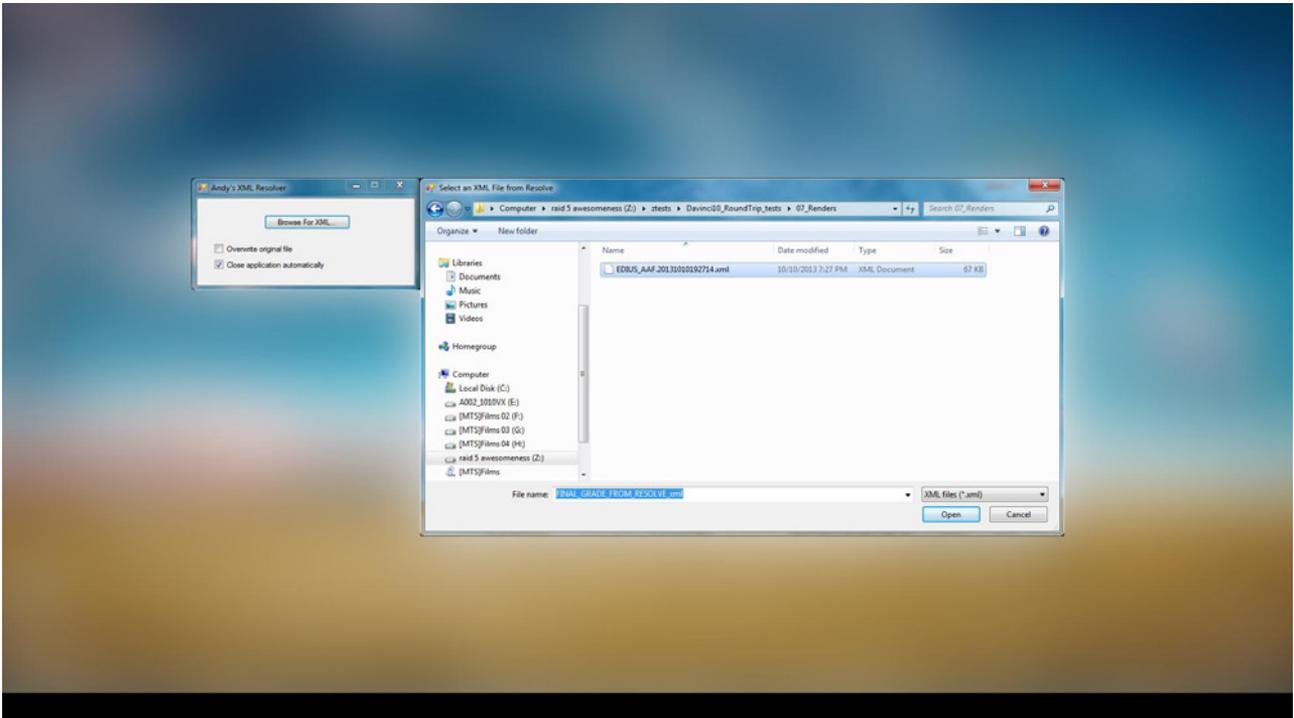




8 Once you have finished coloring the edit, you can then render it out into any format you like. For cinematic release you should render out to a 16-bit TIFF sequence ready to be encoded into a DCP. Rendering is done in the [Deliver] tab at the bottom of the screen. For round-tripping back to EDIUS, go to the [Deliver] tab and add an [IN point] and an [OUT point] at the beginning and end of the

timeline. Then, on the right hand side, choose [Easy Setup] and [Final Cut Pro XML Round-Trip], then change the codec to [QuickTime YUV 422 10b], choose a destination folder, then click [Add Job to Render Queue] and press [Start Render]. Resolve will now render the graded clips and create an XML that links a project to those new clips.

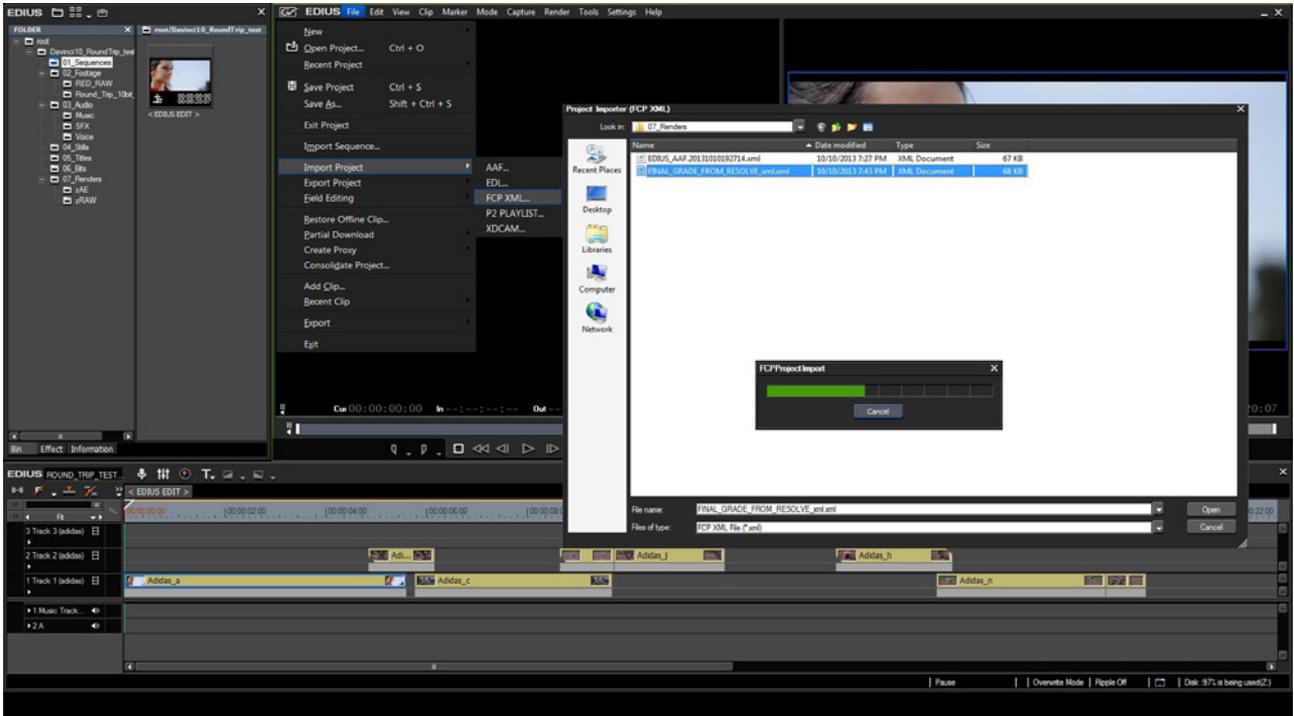




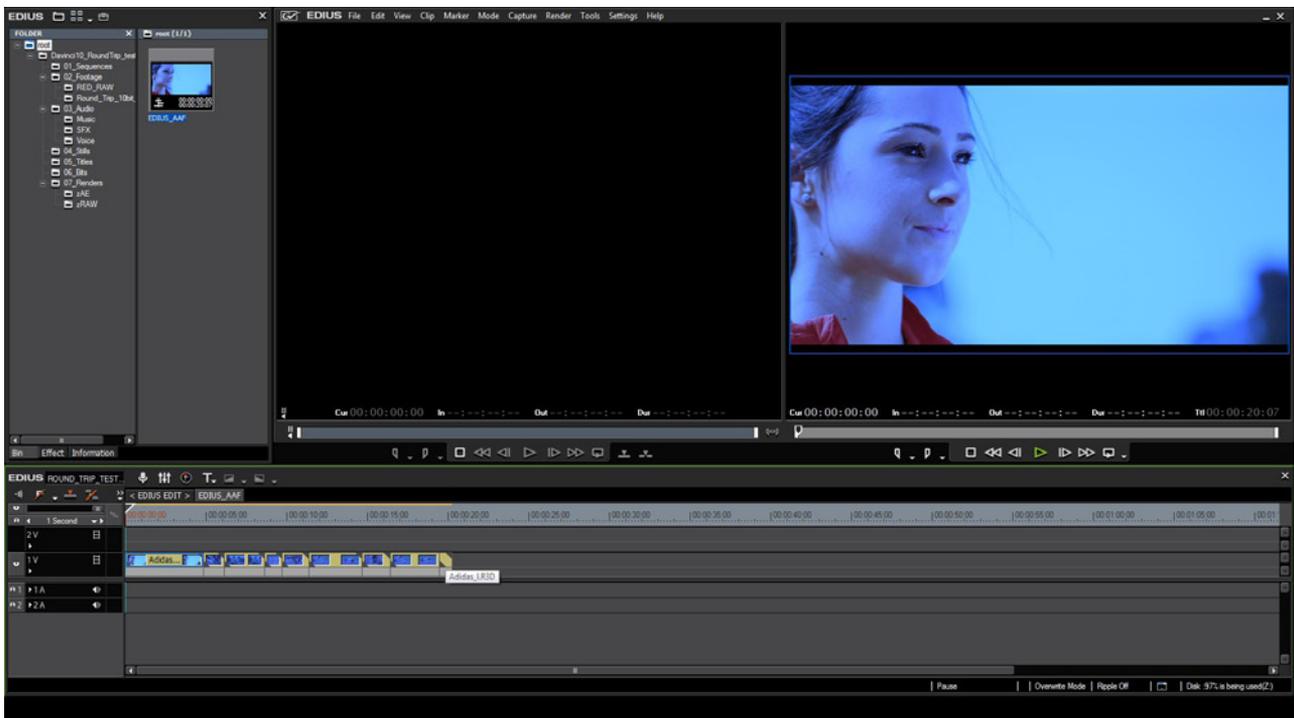
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Now you have your clips all graded and looking beautiful, ready to be imported back into EDIUS. BUT, before you do that, the XML that Resolve has created needs to be changed. Andy Mees has created a VERY helpful tool for the community that does just

that! What a wonderful gift, thank you Andy! You can read more about his XML Resolver, and download the application, here: andymees.wordpress.com/xml-resolver/. Once you have XML Resolver, double-click it and locate your XML that was created in Resolve.



10 Now save the new, fixed, EDIUS-friendly XML and open EDIUS. Then choose [File] > [Import Project] > [FCP XML] and locate the new “fixed” XML file. EDIUS will now import a new sequence with the newly graded clips.



IMPORTANT NOTES

- EDIUS' video effects are not supported with AAF export. Dissolves will work, but transparency changes to the track, fades, etc., are not supported.
- Do not export AUDIO with the AAF, as this also causes problems. You can re-link the audio later in EDIUS by copy and pasting it from your original sequence into the newly colored sequence.
- Frame sizes larger than 3840 x 2160 are not supported in the free LITE version of DaVinci Resolve. However, if you have the FULL version, then you can work in native 4096 x 2160.
- Make sure the frame rates of your EDIUS project and clips match, otherwise the AAF import will not work.
- When using REDCINE-X PRO, be sure to do your base grade using any gamma space other than [REDGamma3], as it is not supported in EDIUS.

ABOUT GRASS VALLEY

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and greater efficiencies. Customers include world-leading broadcasters, teleproduction facilities, service providers, government, religious, educational, corporate, and independent video professionals. Grass Valley is headquartered in Hillsboro, OR, and maintains local presence across the globe with offices throughout North and Latin America, Europe, the Middle East, and Asia-Pacific regions.

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