

## Using Grass Valley EDIUS Editor with Avid AirSpeed 5000 and AirSpeed | 5500

## Overview

Avid<sup>®</sup> AirSpeed<sup>®</sup> integration with the Grass Valley<sup>®</sup> EDIUS<sup>®</sup> editing system. Media captured by AirSpeed can be edited by EDIUS and AirSpeed can play media created by the EDIUS editor. This document covers the core concepts required for a successful ingest, edit, and playout workflow using AirSpeed and EDIUS.

### The main requirements for this workflow are:

- AirSpeed video server
- Grass Valley EDIUS editor (EDIUS 7 is used as the reference)
- FTP client software that can transfer media to/from AirSpeed (e.g. FileZilla)
- Media storage that is accessible by EDIUS and the FTP client
- An Ethernet/IP network to tie the components together



## Shared Video Formats and Codecs

AirSpeed and EDIUS have the ability to interchange a number of Video Formats and Codecs. The following is a partial list of some of the more common operating points that the two share.

### HD 1080i 50/59.94, 720p 50/59.94

- AVC-Intra 50/100
- MPEG-2 HD/XDCAM 17.5/25/35(HD&EX)/50

SD

- DV/DVCPRO 25/50
- D10/IMX/MPEG-2 SD 30/50

## File Format

Both AirSpeed and EDIUS support the import and export of media files wrapped in the MXF OP1a format. It is recommended to use this file format when using both EDIUS and AirSpeed.



## Using media from AirSpeed with an EDIUS editor

### FTP to/from AirSpeed® to an EDIUS® media file storage location

Before using media in EDIUS, the media needs to be transferred from the AirSpeed to a storage location that the EDIUS can use for editing. The media transfer can be done using most any FTP client (FileZilla is an example of an open source FTP client that could be used).

The following points may be useful when using FTP to transfer media to/from AirSpeed:

- The default FTP directory for media on AirSpeed is /active/clips. This is a virtual FTP directory and does match the file system structure internal to the AirSpeed
- On the AirSpeed you must create a user with FTP privileges and password. These credentials will be needed to log into AirSpeed using FTP
- · "Anonymous" and "FTP" account names are not supported
- The file name that shows in the FTP directory will match the Video ID of the clip. The file in the FTP directory will have an ".mxf" extension added to it
- If needed, you can find a clip and its associated Video ID using AirSpeed Remote Console
- To get a reliable editing experience you may need to wait for for the transfer of the clip to complete

### Open media file within EDIUS

One the media is transferred from the AirSpeed to a location accessible by the EDIUS editor, you can access the media from within EDIUS like you could any other clip. This is done by using the Add Clip function.

Once the clip is open within EDIUS you can view it and edit with it.

| Print to File                                                                                                                     |         |                                                                                                                        | ×                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Uncompressed<br>- GF<br>- H.264/AVC<br>- HDV<br>- Infinity<br>- K2<br>- MPEG<br>- MXF<br>- P2<br>- QuickTime<br>- Grass Valley HQ |         | Exporter Exporter AVCIntra MXF AVCUltra MXF D10 MXF D10 MXF DVCMKF DVCPRO25 MXF DVCPRO50 MXF DVCPROHD MXF DVCPROHD MXF | Description Exporter Plug-in for AVCIntra MXF file Exporter Plug-in for AVCUltra MXF file Exporter Plug-in for DV MXF file Exporter Plug-in for DV MXF file Exporter Plug-in for DVCPRO25 MXF file Exporter Plug-in for DVCPRO50 MXF file Exporter Plug-in for DVCPROHD MXF file |
| Grass Valley HQX<br>Windows Media<br>XDCAM                                                                                        | Ģ       | HQX MXF<br>JPEG2000 MXF<br>MPEG2 MXF                                                                                   | Exporter Plug-in for HQX MXF file<br>Exporter Plug-in for JPEG2000 MXF file<br>Exporter Plug-in for MPEG2 MXF file                                                                                                                                                               |
| Export Between In and Out                                                                                                         |         | Display <u>T</u> imecode                                                                                               | Search                                                                                                                                                                                                                                                                           |
| <ul> <li>Advanced</li> <li>Change Video Format</li> </ul>                                                                         |         |                                                                                                                        | Change Audio Format                                                                                                                                                                                                                                                              |
| SD NTSC 720 x 480                                                                                                                 |         | -                                                                                                                      | Channels 2ch *                                                                                                                                                                                                                                                                   |
| Frame <u>S</u> ize 720 x 480 *                                                                                                    |         | 720 x 480                                                                                                              | Sampling Rate 48000Hz *                                                                                                                                                                                                                                                          |
| Aspect Ratio Current proj                                                                                                         | ect dis | play aspect 👻 4 : 3                                                                                                    | Sample Format                                                                                                                                                                                                                                                                    |
| Letterbox / S                                                                                                                     | Side p  | anel 🗸                                                                                                                 | Export Audio                                                                                                                                                                                                                                                                     |
|                                                                                                                                   | rscan   | Area                                                                                                                   | Create Waveform Cache                                                                                                                                                                                                                                                            |
| Frame Rate 29.97 *                                                                                                                |         |                                                                                                                        |                                                                                                                                                                                                                                                                                  |
| Frame blend                                                                                                                       | ng      |                                                                                                                        | Preserve A <u>n</u> cillary data                                                                                                                                                                                                                                                 |
| Field Order Lower field                                                                                                           |         |                                                                                                                        |                                                                                                                                                                                                                                                                                  |
| Default<br>TC Mode                                                                                                                | -       |                                                                                                                        |                                                                                                                                                                                                                                                                                  |
| Chann <u>el</u> Color                                                                                                             |         | ~                                                                                                                      |                                                                                                                                                                                                                                                                                  |
| Save as <u>d</u> efault                                                                                                           | < (     | a et                                                                                                                   | Add to Batch List Export Cancel                                                                                                                                                                                                                                                  |

# Exporting media from EDIUS to AirSpeed

One method of creating and sending media from EDIUS to AirSpeed is to export the sequence to a clip and then FTP the resulting file to the AirSpeed.

The sequence export can be done using the "Print to File" function of EDIUS. This operation can be accessed by File -> Export -> Print to File or by pressing F11. The dialog will look something like the image to the right.

The appropriate export settings used will depend on the settings for the current project as well as the type of media being created. Sample dialog selections for each codec type are listed in the Export Settings section.

### FTP EDIUS Media to an AirSpeed

Once the media is exported to a file, the file can then be transferred using FTP to the AirSpeed. See the FTP section earlier in this document.



## Sample Export Settings

The following are sample settings to use when exporting media from an EDIUS<sup>®</sup> editor to be used with AirSpeed<sup>®</sup>. These are just a few select examples and does not cover all supported formats and frame rates.

### MPEG-2 HD/XDCAM

This example shows one way to export MPEG-2 HD 50mbit 1080 59.94i from EDIUS to be used with AirSpeed.



### AVC-Intra

This example shows one way to export AVC-Intra 100mbit 1080 59.94i from EDIUS to be used with AirSpeed.





### DV/DVCPRO

This example shows one way to export DVCPRO 50mbit NTSC from EDIUS® to be used with AirSpeed®.

| Print to File      |                    |                                                     |                                        | × DVCPRO50 M | IXF          |                          |                  |            | ×      |
|--------------------|--------------------|-----------------------------------------------------|----------------------------------------|--------------|--------------|--------------------------|------------------|------------|--------|
| Uncompr            | ressed 🔺           | Exporter                                            | Description                            |              |              |                          |                  |            |        |
| GF<br>H 264/AVC    |                    | Exporter                                            |                                        | Clip Name    |              |                          |                  |            |        |
| HDV                |                    | AVCIntra MXF                                        | Exporter Plug-in for AVCIntra MXF file |              |              |                          |                  |            |        |
| Infinity           |                    | AVCUltra MXF                                        | Exporter Plug-in for AVCUltra MXF file | Bestinddon   |              |                          |                  |            |        |
| MPEG               |                    | D 10 MXF                                            | Exporter Plug-in for D 10 MXF file     | • Folder     | C:\Users     | s \Edius Export          |                  | Select     |        |
| MXF                |                    | DVCPRO25 MXE                                        | Exporter Plug-in for DVCPRQ25 MXE file | 0            |              |                          |                  |            | -      |
| P2<br>Ouid/Time    | _                  | DVCPRO 50 MXF                                       | Exporter Plug-in for DVCPRO50 MXF file |              |              |                          |                  |            |        |
| Grass Va           | aley HQ            | DVCPROHD MXF                                        | Exporter Plug-in for DVCPROHD MXF file |              | Name         | Address                  | Directory        | User Name  |        |
| Grass Va           | alley HQX          | HQX MXF                                             | Exporter Plug-in for HQX MXF file      |              |              |                          |                  |            |        |
| Windows Me         | edia 🕓             | JPEG2000 MXF                                        | Exporter Plug-in for JPEG2000 MXF file |              |              |                          |                  |            |        |
| Audio              |                    |                                                     | Exporter Plug-In for MPCG2 MAP file    |              |              |                          |                  |            |        |
| Export Betwee      | en In and Out      | Display Timecode                                    | Search                                 |              |              |                          |                  |            |        |
| 🗹 Enable Conve     | rsion              | 🗹 Export in 16bit/2gh                               |                                        |              |              |                          |                  |            |        |
| ▼ Advanced —       |                    |                                                     |                                        |              | Over         | write file when it exist |                  |            |        |
| Change <u>V</u> id | leo Format         |                                                     | Change Audio Format                    |              |              |                          |                  |            |        |
| SD NTSC 720 x      | x 480              |                                                     | Channels 2ch *                         |              |              | id to FTP after export   | ang nie          |            |        |
| Frame <u>S</u> ize | 720 x 480 *        |                                                     | Sampling Rate 48000Hz *                |              | 🗹 Do no      |                          |                  |            |        |
| Aspect Ratio       | Current project di | Current project display aspect 🔹 1: 3 Sagple Format |                                        |              |              |                          |                  |            |        |
|                    | Letterbox / Side p | kerbox / Side panel 👻 Esport Audio                  |                                        |              |              |                          |                  |            |        |
|                    | Crop Overscar      | n Area                                              | Create Waveform Cache                  | -Audio Sett  | ings         |                          |                  |            |        |
| Erame Rate         | 29.97 *            | -                                                   |                                        | Changela     |              |                          | Changels Der Tra | le Deb     |        |
|                    | Erama blanding     |                                                     |                                        | Charlies     |              |                          |                  |            |        |
|                    |                    |                                                     | Preserve Ancillary data                | Quantizat    | ion Bit Rate | Current setting 👻        | Type             | AES3       |        |
| Field Order        | Lower field        |                                                     |                                        |              |              |                          |                  |            |        |
| Default            | Drop frame *       | <b>•</b>                                            |                                        | Curtary T    |              |                          | KAC CIT          | <b>F12</b> |        |
| IC Moge            | Color.             |                                                     |                                        | System I     | ype          | SDII-CP -                | KAG SIZE         | 512        |        |
|                    | Color              |                                                     |                                        |              |              |                          |                  |            |        |
|                    |                    |                                                     |                                        |              |              |                          |                  | ок         | Cancel |
| Save as defaul     |                    | <b>•</b>                                            | Add to Batch List Export Cancel        | 4            |              |                          |                  |            |        |
|                    |                    |                                                     |                                        |              |              |                          |                  |            |        |

### D10/IMX/MPEG-2 SD

This example shows one way to export D10/IMX 50mbit NTSC from EDIUS to be used with AirSpeed.

| Print to File                                                                  |                                                                                                                                                                                     | ×                                                                                                                                                       | D10 MXF                          |                                    |                    |                |           | x      |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------|--------------------|----------------|-----------|--------|
| H.254/AVC Exporter<br>HDV HAVCUltra MOF<br>Infinity E D10 MOF<br>MFFC E D1 MOF |                                                                                                                                                                                     | Description  Exporter Plug-in for AVCUfra MVF file Exporter Plug-in for D10 MVF file Exporter Plug-in for D10 MVF file                                  | <u>C</u> lip Name<br>Destination | EDIUSNTSCD 1050                    |                    |                |           |        |
|                                                                                |                                                                                                                                                                                     | Exporter Plug-in for DVCPRO25 MXF file<br>Exporter Plug-in for DVCPRO50 MXF file<br>Exporter Plug-in for DVCPROHD MXF file                              | • <u>F</u> older                 | C:\Users\Docum                     | ents\Current Proje | cts/scr        | Select    |        |
| Grass Va<br>Grass Va<br>Windows Me<br>XDCAM<br>Audio<br>Others                 | alley HQX         III HQX MOF           alley HQX         III PEGS200 MWF           III MOF         III MOF           III MOF         III HQX MOF           III MOF         III MOF | Exporter Plug in for HQX MXF file<br>Exporter Plug in for PEG2000 MXF file<br>Exporter Plug in for PEG2000 MXF file<br>Exporter Plug in for HQ MXF file | Or                               | Name                               | Address            | Directory      | User Name |        |
| Export Betwee                                                                  | en In and Out Display Timecode                                                                                                                                                      | Search                                                                                                                                                  |                                  |                                    |                    |                |           |        |
| Enable Conve                                                                   | rsion 🗹 Export in 16bit/2d                                                                                                                                                          |                                                                                                                                                         |                                  | Overwrite file                     | when it exists     |                |           |        |
| <ul> <li>Advanced</li> </ul>                                                   |                                                                                                                                                                                     | Re                                                                                                                                                      |                                  | Upload to FTP after exporting file |                    |                |           |        |
| Change Vid                                                                     | leo Format                                                                                                                                                                          | Change Audio Format                                                                                                                                     |                                  | Do not odd fil                     | o ovtoncion whom ( | woorting to ET |           |        |
| SUNISC 7201                                                                    | × 480 👻                                                                                                                                                                             | Channels 200 *                                                                                                                                          |                                  |                                    | e extension when   |                |           |        |
| Frame Size                                                                     | 720 x 480                                                                                                                                                                           | Sampling Rate 48000Hz *                                                                                                                                 | V Keep the                       | created file when                  | aborting           |                |           |        |
| Aspect Ratio                                                                   | Current project display aspect 🚽 16 : 9                                                                                                                                             | tdisplay aspect V 10 : 0 Simple Format Biblet *                                                                                                         |                                  |                                    |                    |                |           |        |
|                                                                                | Letterbox / Side panel 🗸                                                                                                                                                            | Export Audio                                                                                                                                            | Audo Dit Date Fourthan           |                                    |                    |                |           |        |
|                                                                                | Crop Overscan Area                                                                                                                                                                  | V Create Waveform Cache                                                                                                                                 | Dicitate                         | Joimpha                            |                    |                |           |        |
| Frame Rate                                                                     | 29.97 *                                                                                                                                                                             |                                                                                                                                                         | Audio Settin                     | gs                                 |                    |                |           |        |
|                                                                                | Frame blending                                                                                                                                                                      |                                                                                                                                                         | Channels                         | Current                            | t setting 👻 Cha    | nnels Per Trad | k 1ch     |        |
| Field Order                                                                    | Lower field 🗸                                                                                                                                                                       |                                                                                                                                                         | Quantizatio                      | n Bit Rate Curreni                 | t setting 👻 Typ    | e              | AES3      | -      |
| Default                                                                        | Drop frame * 🗸                                                                                                                                                                      |                                                                                                                                                         | 0                                |                                    |                    |                |           |        |
| Channel                                                                        | Color                                                                                                                                                                               |                                                                                                                                                         | System Typ                       | spin-o                             | P KAG              | Size           | 512       |        |
|                                                                                |                                                                                                                                                                                     |                                                                                                                                                         |                                  |                                    |                    |                |           |        |
| Save as <u>d</u> efaul                                                         | t 🗄 X 🤹 😅                                                                                                                                                                           | Add to Batch List Export Cancel                                                                                                                         |                                  |                                    |                    |                | ОК        | Cancel |

### For more information, visit avid.com//ingest-playout

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