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Using ViewCast products for Non-linear Editing

Contents

Abstract: This document is designed to provide an overview of principles required when using non-linear editing software with ViewCast product. Osprey Video products will specifically be discussed as the focal product line discussed.

Using the methods and techniques described in this document, one can acquire media from analog or digital sources for subsequent editing in popular editing packages like Adobe Premier, Vegas Video, and MediaStudio Pro.

The reader should be familiar with the Microsoft Windows 2000 Professional or XP operating systems, and basic audio/video and editing principles.

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Using your ViewCast product in an editing environment

Both Osprey Video and Niagara streaming system products can leverage many of the video and audio editing capabilities found in popular editing packages today such as Adobe Premiere, Sonic Foundry Vegas Video, and Ulead MediaStudio Pro. Osprey Video capture cards are designed with flexibility in mind allowing you to sit in the director's chair.

Any input, any codec, any output

There are many models of Osprey Video capture cards each with unique differences and many differing by the input types supported. For instance an Osprey-210 supports analog video capture from either composite or S-Video sources along with analog audio from either 3.5mm or RCA stereo inputs. In contrast, you may have an Osprey-540 that support everything from analog audio and video sources to DV sources to professional media sources with SDI connectivity. Whatever your Osprey Video card offers you in terms of input support you can be assured that it can be captured for editing.

In some cases, you may desire to capture uncompressed video in an .AVI format and in others you might apply a codec like Cinepak. In either case Osprey Video products are there supporting you.

What about my DV inputs?

Certain Osprey Video products like those in the Osprey-500 and Osprey-540 series offer the ability to stream audio and video inputs live from a DV input. Osprey Video cards are designed with the intent of streaming audio and video in a live scenario and have embraced techniques and methodologies supporting this intent.

Many users using DV inputs often think of DV in a native format, commonly a 25Mbps format composed of I-frames. DV has evolved into a great editing format given the quality, abundance of reference frames allowing frame accurate editing, and the association with OHCI offering device control.

Many of the popular editing packages today allow for both native DV and traditional Video For Windows input session settings.

Adobe Premiere users are accustomed to seeing an initial "Load Project Settings" window like the one below when they open the application. More information is provided in Appendix A to assist with using your Osprey Video product with Vegas Video and MediaStudio Pro.
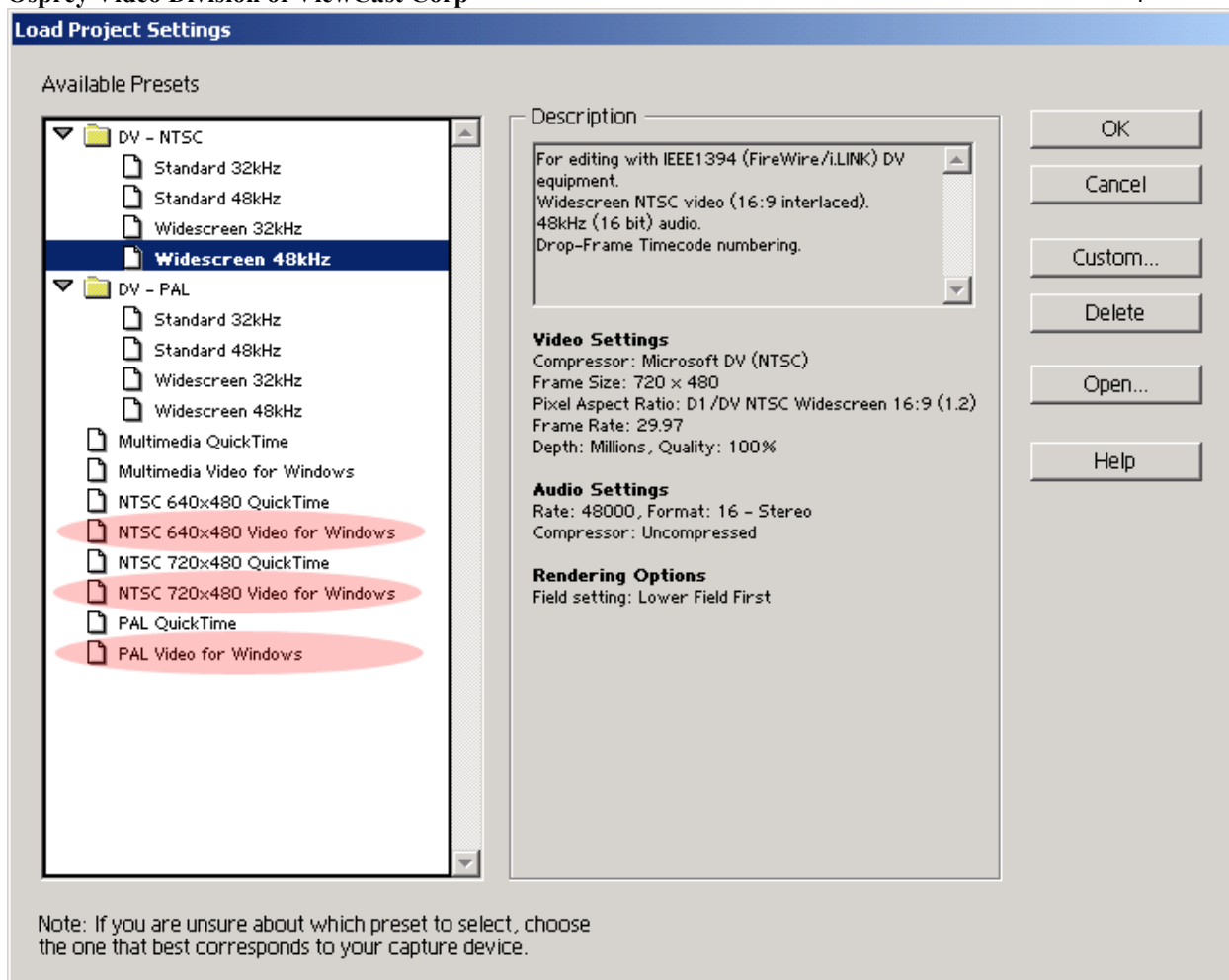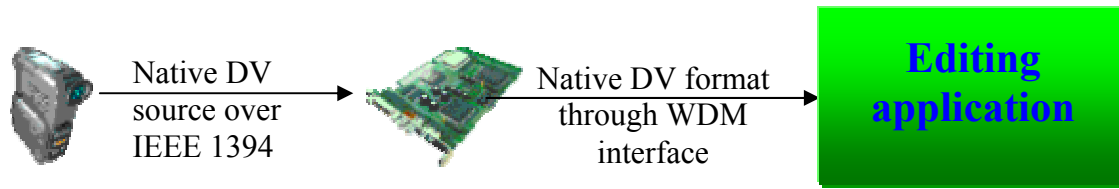
Notice the default selection in blue is for a NTSC signal from a DV source. Many users assume this is the selection to choose if you are using DV source with an Osprey Video capture card. However, this is not the case.
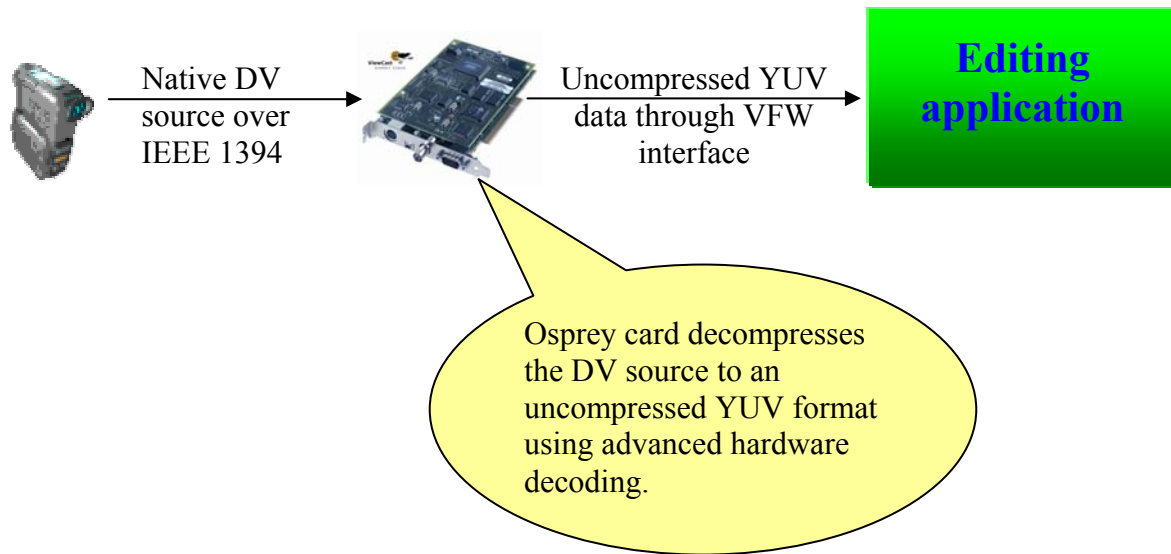
Highlighted in pink are the three applicable selections for usage with any Osprey Video capture card regardless of input source, i.e. composite, S-Video, DV, or SDI.

The key point is that Osprey Video products DO allow for capture from a DV input but do not capture native DV to the host computer. Osprey Video products transcode the captured DV source material in realtime from the compressed native DV format to an uncompressed YUV format; this does NOT prohibit editing though. Below is an illustration comparing how typical OHCI cards handle DV versus an Osprey Video card.

Capturing DV using a OHCI DV capture card

Native DV source over IEEE 1394 → Native DV format through WDM interface → **Editing application**

Capturing DV using a Osprey Video capture card

Native DV source over IEEE 1394 → Uncompressed YUV data through VFW interface → **Editing application**

Osprey card decompresses the DV source to an uncompressed YUV format using advanced hardware decoding.

The end result has mostly the same effect in that both approaches yield format that are editable.

In summary, when you are using your Osprey Video device to edit video there are a few points that should be remembered. First, irrespective of the input type used for capture, i.e. composite, S-Video, DV or SDI, you always will use the same settings for acquiring video. Secondly, Osprey Video capture cards are NOT the same as OHCI cards even though Osprey cards do allow for capture of DV. Therefore an Osprey card will not operate in exactly the same manner.