



### 1 General Questions

1. **On Windows 7, while using Visual Studio 2010, I get a COFF error when I build.**

In the linker settings, change the `Build Incrementally` option to NO.

2. **Connecting the decoder MFT to the encoder MFT directly for interlace streams fails and generates topology errors.**

Currently, the AMD H.264 encoder does not support the interlaced mode. Therefore, if the interlaced mode is presented to the encoder, the encoder fails to build the topology.

3. **Why does the Video Quality filter provided by AMD not work on Trinity or Richland platforms?**

The Video Quality filter is supported for Southern Island graphics cards (and later versions). Trinity and Richland platforms contain Northern Island graphics cards.

4. **How do I generate the MFTrace for my processing topology?**

For generating the MFTrace for your topology, review the following link:

<http://msdn.microsoft.com/en-us/library/windows/desktop/ff685370%28v=vs.85%29.aspx>

5. **I have Richland + SI dGPU. The PlaybackVQ or TranscodeVQ sample runs, but the Video Quality filter does not take effect.**

The Video Quality (VQ) filters are not supported on NI platforms. Hence the VQ component gets bypassed when the display is connected to an NI platform. Connecting the display to a supported dGPU will ensure that VQ filters take effect.

6. **Why does the Image Overlay sample not execute on Intel machines?**

By default, the DX <-> OpenCL Interop is enabled in the Image Overlay sample. Some of AMD's OpenCL extensions may not be supported on Intel machines. Disabling Interop (by setting the `useInterop` flag to 0 in the configuration file) will ensure that the sample executes successfully on Intel machines.

7. **Elementary streams are required as input to the Simple Transcode sample. How do I extract the elementary stream from container formats?**

To extract elementary streams from container formats, you can use tools such as the following:

- ☐ FFmpeg (<http://www.ffmpeg.org/download.html>)
- ☐ MP4Box (<http://www.videohelp.com/tools/mp4box>)
- ☐ YAMB (<http://yamb.unite-video.com/download.html>)

For typical container formats, the following tools are recommended:

- .avi with any codec: FFmpeg
- .3gp, .mp4 with MPEG4/H.264 codec: MP4Box, or YAMB (if a GUI is desired)

### Extracting using FFmpeg

- Verify that the required elementary stream format is part of the supported formats by executing the following command:  
`ffmpeg -formats`
- To extract, execute the following command:  
`ffmpeg -i <input> -vcodec copy -f <format> <output.format>`

### Extracting elementary H.264 from an AVI using FFmpeg

- To dump the elementary stream with start codes, execute the following command:  
`-vbsf h264_mp4toannexb -f h264 -vcodec copy`
- Verify that the required elementary stream format is part of the supported formats by executing the following command:  
`ffmpeg -formats` (you should see "format = h264" as one of the supported formats)
- To extract, execute the following command:  
`ffmpeg -i input.avi -vcodec copy -vbsf h264_mp4toannexb -f h264 output.h264`

### Extracting elementary MPEG4 from an AVI using FFmpeg

- Verify that the required elementary stream format is part of the supported formats by executing the following command:  
`ffmpeg -formats` (you should see "format = m4v" as one of the supported formats)
- To extract, execute the following command:  
`ffmpeg -i input.avi -vcodec copy -f m4v output.m4v`

### Extracting using MP4Box

- Get the track-IDs to dump by executing the following command:  
`mp4box -info input.mp4`
- Dump the required track by executing the following command:  
`mp4box -raw <TrackId> input.mp4`
- If you prefer a GUI, use the YAMB tool instead.

## 8. What should I do if the Transcode VQ sample does not work for some H.264 container streams?

- To isolate the issue, generate an elementary stream from the H.264 container stream and run the elementary stream through the Simple Transcode sample.

The Transcode VQ sample uses the `Source-->Decoder-->VQ Filter-->Encoder-->Sink` topology, while the Simple Transcode sample uses the Custom `Source-->Decoder-->Encoder-->Custom Sink` topology. Therefore, if the issue does not exist with the Simple Transcode sample, the `Decoder` and `Encoder` modules must be working correctly, and the `Source`, `Sink`, and `VQ Filter` modules will need to be debugged further.

#### 9. Can a software or hardware encoder/decoder be explicitly specified?

- Yes, you can specify whether the software encoder/decoder (codec) or the hardware codec must be used by setting the `useSWCodec` flag in the configuration file for the following samples:
  - ImageOverlay OpenCL
  - Simple Transcode
  - Transcode VQ
  - Video Edit AMP
  - Video Edit OpenCL
- By default, the hardware codec is selected.  
 If the hardware codec is specified, i.e. if the `useSWCodec` flag is set to 0, then the sample uses the AMD hardware codec if it is available; otherwise, the sample uses any other available hardware codec. If no hardware codecs are available, the sample falls back to using the software codec.  
 If the `useSWCodec` flag is set to 1, the sample uses the software codec; otherwise, the sample uses the AMD hardware codec or any other available hardware codec (in that order).

## 2 DEM Questions

#### 10. Why is audio missing in the VCE\_DEM in AV\_TS mode?

Audio and video are provided in only the "Generic" usage mode. Audio is not provided in the "Wireless display" usage mode and in the "Low latency" usage mode.

#### 11. How is Audio and Video synchronization maintained in VCE DEM?

The Display Controller Engine does audio-video synchronization before transferring control to the VCE. To ensure that the application delivers synchronized video and audio, it is recommended to use the DEM APIs. The `GetTimeStamp()` method (part of the `AMFDemBuffer` class) can be used to determine the timestamps of the data; the `GetDataType()` method (part of the `AMFDemBuffer` class) can be used to determine the data type (i.e. whether it is audio or video).

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