

Extended UWP Samples

Overview

Extended UWP Samples solution (InteropSamples.sln) contains 3 projects:

- MSDKInterop – DLL providing classes for between MSDK and UWP applications
- EncoderSample – sample showing how to encode raw stream (YUV) into elementary encoded stream (AVC, HEVC)
- PlayerSample – sample showing how to use MSDK for decoding compressed streams and render decoded frames using MediaElement and MediaStreamSource classes.

Hardware Requirements

PC with Intel Core CPU of 6th generation (SKL) or higher.

Software Requirements

- Windows 10 with installed MSDK DFP Package (RS4 with sideloaded package or RS5 with package installing from Store)
- Microsoft Visual Studio 2017
- Optional: FFMPEG package (for MP4 muxing support).

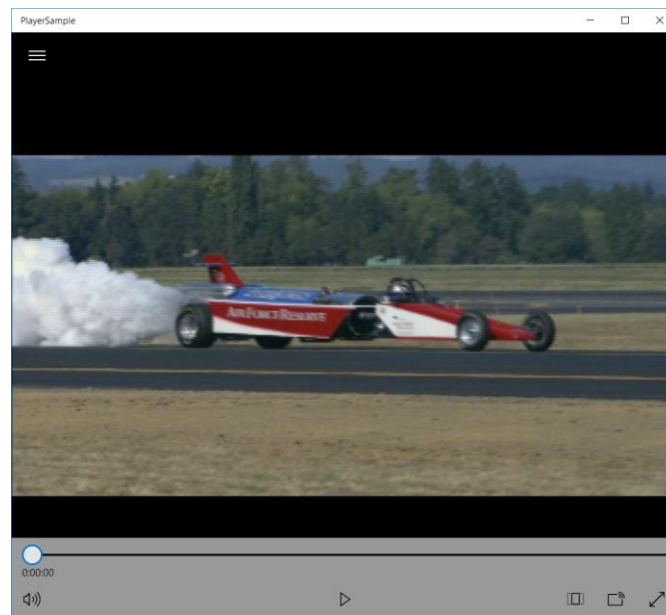
How to Build the Application

See readme.txt in package root folder.

Running the Software

Run samples from Visual Studio or build Store Package using Visual Studio and install them using generated PowerShell script. Both methods use sideloading, so you have to enable Developer Mode in Windows settings to run samples.

After launching PlayerSample use popup menu to open elementary stream file (codec type is determined by file extension) and you player control buttons to play/pause playout



After launching EncoderSample provide required information about files into corresponding fields (in and out file names, frame size, frame rate, color format) and fill in encoding parameter or use default values. Codec type is determined by file extension of output file.

The screenshot shows the EncoderSample application window. It has a title bar with standard window controls. Below the title bar is a menu bar with 'Encode' and 'Play Encoded Stream'. The main area is divided into two sections: 'Source and Destination' and 'Encoding Settings'.

Source and Destination:

- Source:** A text field with the placeholder 'Select Input file with YUV content' and a browse button (three dots).
- Width:** A text field.
- Height:** A text field.
- FPS:** A dropdown menu showing '30'.
- FCC:** A dropdown menu showing 'I420(YUV)'.
- Output:** A text field with the value 'Videos\output.h264' and a browse button (three dots).

Encoding Settings:

- Target Usage:** A dropdown menu showing 'Balanced (4)'.
- Bitrate Control:** A dropdown menu showing 'VBR'.
- Bitrate (Kbps):** A text field showing 'Auto If Empty'.
- Max Kbps:** A text field showing 'Default'.
- Low Delay BRC:** A checkbox that is currently unchecked.
- Max Frame Size:** A text field showing 'Default'.
- GOP Ref Distance:** A text field showing 'Default'.
- Win BRC Size:** A dropdown menu showing 'Disabled'.
- Win BRC Max Avg:** A text field showing 'Default'.
- Number of Slices:** A text field showing 'Default'.
- Max Slice Size:** A text field showing 'Default'.
- Intra Refresh:** A dropdown menu showing 'No Refresh'.

At the bottom of the window, there is a progress bar showing '0' and an 'Encode' button.

Known Limitations

- 32 bit MSDK DFP package is not included, only x64 DFP package is included, so samples won't work in 32-bit mode (although samples may be compiled in that mode).
- MP4 files (MP4 container) cannot be played out.

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