

Intel® Video Pro Analyzer 2014

Release Notes

(Version 1.1.0)

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Overview

The **Intel® Video Pro Analyzer** is a graphical coded video bitstream analysis tool, supporting both major next-generation coding standards:

- HEVC: (ISO/IEC 23008-2 MPEG-H Part 2 or ITU-T H.265)
- Google* VP9*

Once a bitstream is loaded, the tool allows the user to inspect each major step of the decode process visually and numerically, and the structure of the coded image can be explored. This data can be used as a visual reference when learning about HEVC/VP9 or when debugging a particular encoder or decoder.

New Features

- Arrows drawn in the filmstrip to show reference pictures.
- Heat map gradient can be customized.
- Added statistics normalization with bits, not only pixels.
- Added per-component image view.
- Added crop option to command line dump.
- VP9*: Showing all persistent data between frames in the Refs tab.
- VP9: Added support for repeated frames.
- HEVC: Showing all CABAC state variables, not just ivlCurrRange and ivlOffset.
- Bugfix VP9: Default loop filter mode and reference deltas should not apply when `mode_ref_lf_delta_enabled` is zero.
- Bugfix VP9: Several issues relating to segmentation, especially when `seg_update_data` is zero.
- Bugfix: Resolved a random concurrency crash that could show up during playback.
- Bugfix for HEVC problem when the input pixels to horizontal deblocker edges could show as 0.
- Several stability enhancements when decoding corrupted HEVC streams.

System Requirements

Hardware

- A system capable of running the Java* JVM, version 7.
- 2GB RAM minimum, 4GB recommended when loading large pictures.

Software

- Any OS capable of running Java 7.
- Java JRE or Java JDK version 7.

Package Contents

<install-folder>

Intel® Video Pro Analyzer Release Notes (this file), Intel® Video Pro Analyzer User Guide, .jar and .exe executables.

Installation

1. Extract files from the .ZIP file to the target hard drive.
2. For Microsoft* Windows* operating systems, IntelVideoProAnalyzer.exe may be run directly. For all systems, IntelVideoProAnalyzer.jar may be launched using the following command line, where [X] is replaced by the desired maximum heap size in gigabytes.

```
java -Xmx[X]g -jar IntelVideoProAnalyzer.jar
```

It may be helpful to put the above command in a batch file or script appropriate for the target system.

On Windows, Java may not set the maximum heap size to a sufficient amount when simply double-clicking the .jar or by omitting the -Xmx switch on the command line. In this case an out-of-memory error could occur when loading large streams.

Known Limitations

The Intel® Video Pro Analyzer has the following known limitations:

- Supported codecs are HEVC and VP9* only.
- HEVC sequences are supported in Annex B format only, owing to the lack of official support for HEVC in other container formats.
- Supported containers for VP9 are IVF and WebM (MKV) only.
- HEVC sequences that do not conform to Main, Main 10 or Main Still Picture Profile may not load correctly.
- VP9 sequences with color spaces other than YUV 4:2:0 are not supported.

- On Windows*, command line mode only works with the .jar and the .exe. But a console window is opened in background to support it with the .exe file.

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