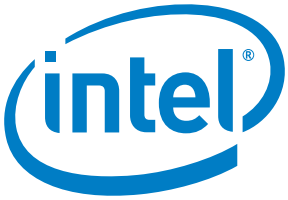


Concurrent Video Analytic Sample Application (Linux) Release Notes 2020.3.0

Release Notes

26 October 2020

Version History/Revision History

These are the main releases of concurrent video analytic sample application:

Date	Revision	Description
December 23, 2019	0.5	Initial release
March 5, 2020	1.0	Add new features descriptions
June 5, 2020	2.0	Update for 2020.2 release
Oct 19, 2020	3.0	Update for 2020.3 release

Intended Audience

OEM/ODM software developers are our target audience.

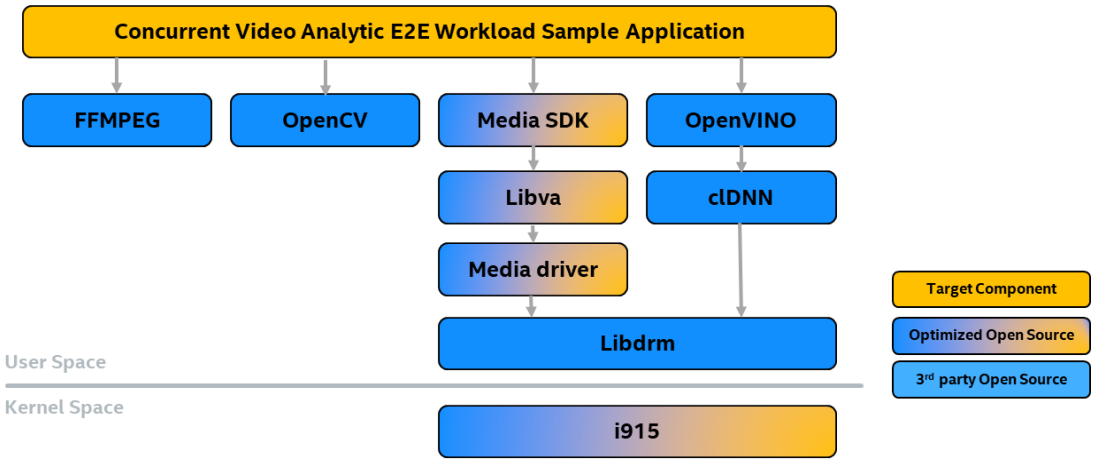
Customer Support

For NDA customers, please contact your corresponding FAE. For technical support, including answers to questions not addressed in this product, report issues on our github issue page.

Contents:

1 Introduction

The concurrent video analytic sample application “video_e2e_sample” leverages open source Intel® Media SDK for video codec support, OpenVINO™ for inference support. Both workloads will be accelerated by Intel® integrated Graphics. Meanwhile FFmpeg is used for RTSP streaming in support and OpenCV is for bunding box drawing. Below diagram is the high-level software stack for Linux version.



Please refer to the concurrent video analytic sample application user guide for system requirements, installation instructions, and example command line.

To learn more about this product, see:

- New features listed in the New in this Release section below
- Reference documentation listed in the Related Documentation section below

2 New in This Release

New Features

- Support CPU inference by option “-infer::device GPU”.
- Support shared inference network instance between sessions
- Support setting decoding output to RGBP by option “-dc::rgbp”
- Support 2 video decoder outputs from SFC and VPP in different sizes and color format
- Support more detection networks by specify XML files
- Upgrade the MediaSDK to version 2020.3.0 and OpenVINO to version 2021.1.

For the example par file of these new features, please refer to the chapter 2 in concurrent_video_analytic_sample_application_user_guide_2020.3.0.pdf

3 Fixed Issues

- Fix incomplete downloading of libva, media-driver or MediaSDK source packages by adding md5sum checking in build_and_install.sh

- Fix RTSP stream drop at the beginning of playing 16-channel RTSP stream by enabling shared inference network and reducing the networks loading time by 90%.

4 Known Issues

Reference ID	Description	symptom	Impact	Workaround/Resolution	Affected component/module/ driver	Affected OS
1	64 D1 video decode + display test case is not stable on TGL-U	Run with par file n64_d1_1080p_videowall.par. The display will freeze and app return error on TGL-U.	Not able to run 64-channel video wall est case with n64_d1_1080p_videowall	N/A	Display/MediaSDK	Linux

Non-Intel Issues

NULL

5 Related Documentation

concurrent_video_analytic_sample_application_user_guide_2020.3.0.pdf

6 Where to Find the Release

Please use git to download source code from git project https://github.com/intel-iot-devkit/concurrent-video-analytic-pipeline-optimization-sample-l

How to Install this Release

- Run build_and_install.sh under the root directory.
- Please refer to concurrent_video_analytic_sample_application_user_guide_2020.3.0.pdf under directory doc.

7 Release Content

Table 1-1 Revision numbers of components of the Production Candidate release.

Subproject (component)	Location	Revision
video_e2e_sample	video_e2e_sample	2020.3.0

External Dependencies

- MediaSDK 2020.3
- OpenVINO 2021.1
- FFMPEG

8 Best Known Configuration

Please refer to concurrent_video_analytic_sample_application_user_guide_2020.3.0.pdf

9 Hardware and Software Compatibility

- Intel® Core™ i7-8700
- Intel® Core™ i7-8665U
- Intel® Core™ i7-8559U
- Intel® Core™ i7-6770HQ
- Intel® Core™ i5-1135G7

Supported Operating Systems

Ubuntu 18.04

10 Acronyms and Terms

The following acronyms and terms are used in this document (arranged in alphabetic order):

Acronym/Term	Description
E2E	End to End
Intel® OpenVINO™	A free toolkit that facilitating of deployment neural network models across Intel® platforms with a built-in model optimizer for pretrained models and an inference engine runtime for hardware-specific acceleration.
OpenCV	Open Source Computer Vision Library
RTSP	Real Time Streaming Protocol

11 Legal Information

Component	License
Concurrent video analytic sample application	MIT 2.0