Intel® Media Server Studio 2018 R1 – Essentials Edition for Linux* Release Notes

Overview

The **Intel® Media Server Studio – Essentials Edition for Linux*** provides software development tools and libraries needed to develop enterprise grade media solutions on Intel® Xeon® and Core™ processor-based platforms. The studio is designed for optimizing datacenter and embedded media applications for Linux server operating systems to utilize Intel® Iris®, Intel® Iris® Pro and Intel® HD Graphics hardware acceleration capabilities. The suite includes:

- *Intel® Media Server Studio – Graphics driver*
- *Intel® Media Server Studio – SDK* (hereinafter referred to as "SDK") is designed for optimizing datacenter and embedded media applications for Linux server operating systems to utilize Intel® Iris®, Intel® Iris® Pro and Intel® HD Graphics hardware acceleration capabilities.
- *Intel® Media Server Studio – Flexible Encode Infrastructure* is an extension of Intel® Media SDK that gives more control over encoding process compared to the standard Media SDK API with the following caveats:
  - Only AVC encode supported
  - Intel does not provide technical support for the FEI through forum or Intel Premier Support
  - Building an application with FEI may take significantly more effort compared to the standard Media SDK API
  - FEI validation is limited. Some combinations of encoding parameters may lead to unstable application behavior, crashes and hangs.
  - FEI API is not backward compatible
  - FEI is subject to the same EULA terms as Intel® Media Server Studio. Some FEI components are distributed as “pre-release materials” which restricts their usage according to EULA.
- *Intel® Media Server Studio – Samples*

  show how to use different SDK features.

- *Intel® Media Server Studio – SDK for OpenCL™ Applications*

  assists with creating, building, debugging, and analyzing OpenCL applications.
- *Intel® Media Server Studio – Metrics Monitor*

  provides access to a set of GPU metrics.

What's New

The Intel® Media Server Studio 2018 R1 – Essentials Edition for Linux* includes the following components:

- Intel® Media Server Studio 2018 R1 – Graphics driver, version 16.8.69021
- Intel® Media Server Studio 2018 R1 – SDK, version 7.0.1608982; contains PRE-RELEASE Materials
- Intel® Media Server Studio 2018 R1 – Flexible Encode Infrastructure, version 7.0.1608982; contains PRE-RELEASE Materials
- Intel® Media Server Studio 2018 R1 – SDK for OpenCL™ Applications 2017 R2 7.0.0.2580
- Intel® Media Server Studio 2018 R1 – Metrics Monitor, version 1.1.2
- Intel® Media Server Studio 2018 R1 – Samples, version 8.1.25.982. The latest version of samples package (with all samples binaries and corresponding source code) could be downloaded from Intel(R) Media Server Studio Support.

For information on what is new in each component, please read the individual component release notes:

- the Intel® Media Server Studio – SDK Release Notes
  `<studio-extract-dir>/<sdk-extract-dir>/media_server_studio_sdk_release_notes.pdf`
- the Intel® Media Server Studio – Flexible Encode Infrastructure Release Notes
  `<studio-extract-dir>/<sdk-extract-dir>/media_server_studio_fei_release_notes.pdf`
- the Intel® Media Server Studio – SDK for OpenCL™ Applications Release Notes

  https://software.intel.com/en-us/articles/opencl-code-builder-release-notes
- the Intel® Media Server Studio – Metrics Monitor Manual

  `<sdk-install-dir>/tools/metrics_monitor/doc/metricsmon-man.pdf`

System Requirements

Hardware

Intel® Media Server Studio supports the following platforms with the integrated graphics:

- Intel® Xeon® E3-1200 v4 Family with C226 chipset
- Intel® Xeon® E3-1200 and E3-1500 v5 Family with C236 chipset
- 5th Generation Intel® Core™

- 6th Generation Intel® Core™

Additionally, for Intel® Xeon® E5 v4 and v5 processors, support of software-only (CPU) HEVC decode and encode, select video pre-processing (Color Space Conversion, Scaling), and virtualization (KVM*, Xen*) is available.

Note: Individual components could have specific requirements, please read the corresponding release notes.

Software

Please see the individual component release notes to know about supported operating systems and required software list.

Package Contents

Intel® Media Server Studio 2018 R1 – Essentials Edition for Linux* package includes the following components:

Component	Description
`SDK2018Production16.8.tar.gz`	Intel® Media Server Studio – Driver & SDK & Flexible Encode Infrastructure & Metrics Monitor package.
`intel_sdk_for_opencl_<ocl-version>.tgz`	Intel® Media Server Studio – SDK for OpenCL™ Applications package.
`MediaSamples_Linux_<id>.tar.gz`	Intel® Media Server Studio – Samples package.

`media_server_studio_essentials_release_notes.pdf`
`Intel(R)_Media_Server_Studio_EULA.pdf`
`redist.txt`
`site_license_materials.txt`
`third_party_programs.txt`
	Intel® Media Server Studio – Essentials Edition for Linux documentation: this file, EULA, EULA's accompanying files.

Installation

Installation of Intel® Media Server Studio – Essentials Edition for Linux* requires full administrative rights.

Extract files from the `MediaServerStudioEssentials2018R1.tar.gz` file to the target hard drive.

Intel® Media Server Studio 2018 R1 – Driver & SDK installation procedure is described in the corresponding Getting Started Guide

<studio-extract-dir>/<sdk-extract-dir>/media_server_studio_getting_started_guide.pdf. Please refer to the document for details.

Intel® Media Server Studio 2018 R1 – Flexible Encode Infrastructure will be installed together with Intel® Media Server Studio 2018 R1 – Driver & SDK.

Intel® Media Server Studio 2018 R1 – Metrics Monitor will be installed together with Intel® Media Server Studio 2018 R1 – Driver & SDK.

To install Intel® Media Server Studio 2018 R1 – Samples you need to extract corresponding tar.gz file to the target hard drive.

FEI Encoding Sample will be installed as part of Intel® Media Server Studio 2018 R1 – Samples.

To install Intel® Media Server Studio 2018 R1 – SDK for OpenCL™ Applications you need to extract corresponding tar.gz file and run install.sh. Installer will guide installation process, please follow it.

Installation Folders

Intel® Media Server Studio 2018 R1 – Essentials Edition for Linux* components will be installed in the following locations by default:

Component	Description
/opt/intel/mediasdk	Default location of Intel® Media Server Studio – SDK.
/opt/intel/opencl-1.2-sdk-<ocl-version>	Default location of Intel® Media Server Studio – SDK for OpenCL™ Applications.
/opt/intel/mediasdk/tools/metrics_monitor	Default location of Intel® Media Server Studio – Metrics Monitor.

Intel® Media Server Studio – Driver has multiple installation layouts. Please refer to the corresponding Intel® Media Server Studio – Driver & SDK Release Notes for details.

Known Limitations

Intel® Media Server Studio 2018 R1 - SDK and Driver are not compatible with previously released versions of Intel Media Server Studio - Essentials and Professional Editions including HEVC Decode plug-in, HEVC Encode plug-in, HEVC GPU Accelerated Encode plug-in, Premium Telecine Interlace Reverser plug-in, etc.

For information on known limitations in each component, please read the individual component release notes.

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be obtained by calling 1-800-548-4725 or by visiting www.intel.com/design/literature.htm.

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