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

Overview

The **Intel® Media Server Studio – Professional Edition for Linux*** provides software development tools and libraries needed to develop enterprise grade media solutions on Intel® Server Products. 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 – 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.

- *Intel® Media Server Studio – HEVC Decoder and Encoder* (hereinafter referred to as "HEVC") is of set of software development libraries (plug-ins) and tools that that expose the HEVC (ISO*/IEC* 23008-2 MPEG-H Part 2 or ITU-T* H.265 standard) decode and encode acceleration capabilities of Intel® platforms.
- *Intel® Media Server Studio – Video Quality Caliper*
  is a graphical utility for objective and visual quality inspection of encoded or uncompressed videos
- *Intel® VTune™ Amplifier*
  is a powerful threading and performance optimization tool for developers who need to understand an application's serial and parallel behavior to improve performance and scalability.
- *Intel® Media Server Studio – Samples*
  show how to use different SDK features.

What's New

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

- Intel® Media Server Studio 2018 R1 – Graphics driver, version 16.8-69752
- Intel® Media Server Studio 2018 R1 – SDK, version 7.0.16083982
- Intel® Media Server Studio 2018 R1 – Flexible Encode Infrastructure, version 7.0.16083982; contains PRE-RELEASE Materials
- Intel® Media Server Studio 2018 R1 – SDK for OpenCL™ Applications 2017
- Intel® Media Server Studio 2018 R1 – Metrics Monitor, version 1.2
- Intel® Media Server Studio 2018 R1 – Samples, version 8.2.25.982. The latest version of samples package (with all samples binaries and corresponding source code) could be downloaded from Intel(R) Media Server Studio Support.
- Intel® Media Server Studio 2018 R1 – HEVC Decoder, version 1.25.3.1000, and HEVC Encoder, version 1.25.3.1000
- Intel® Media Server Studio 2018 R1 – Video Quality Caliper, version 2.3.0.1
- Intel® VTune™ Amplifier 2018 – VTune™ Amplifier, version 2018.2-551022
- Intel® Media Server Studio Audio Decoder and Encoder is obsolete and removed from the package
- Intel® Media Server Studio Premium Telecine Interlace Reverser is obsolete and removed from the package

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>/<fei-extract-dir>/media_server_studio_fei_release_notes.pdf`
- the Intel® Media Server Studio – Metrics Monitor Manual
  `<studio-extract-dir>/<sdk-extract-dir>/metricsmon-man.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 – HEVC Decode & Encode Release Notes:
  `<studio-extract-dir>/<hevc-extract-dir>/media_server_studio_hevc_release_notes.pdf`
- the Intel® Media Server Studio – Video Quality Caliper Release Notes:
  `<studio-extract-dir>/<caliper-extract-dir>/Video_Quality_Caliper_Release_Notes.pdf`
- the Intel® VTune™ Amplifier Release Notes:
  https://software.intel.com/en-us/intel-vtune-amplifier-release-notes

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 – Professional 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.
HEVC2018R1.tar.gz	Intel® Media Server Studio – HEVC Decoder & Encoder package.
VideoQualityCaliper2018R1.tgz	Intel® Media Server Studio – Video Quality Caliper package.
vtune_amplifier_2018.tar.gz	Intel® VTune™ Amplifier package.
media_server_studio_professional_release_notes.pdf EULA.pdf redist.txt site_license_materials.txt third_party_programs.txt	Intel® Media Server Studio documentation: this file, EULA, EULA's accompanying files

Installation

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

Extract files from the **MediaServerStudioProfessional2018R1.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 tgz file and run install.sh. Installer will guide installation process, please follow it.

To install **Intel® Media Server Studio 2018 R1 – HEVC Decoder & Encoder** you need to extract corresponding tar.gz file and run install.sh. Installer will guide installation process, please follow it. Please ensure you installed SDK before HEVC installation. HEVC installer creates backup copy `plugins.cfg.bak` for `<sdk-install-dir>/plugins/plugins.cfg` (if any); after HEVC installed you need to copy backup content to a new `<sdk-install-dir>/plugins/plugins.cfg`.

To install **Intel® Media Server Studio 2018 R1 – Video Quality Caliper** (hereinafter referred to as "VQC") you need to extract corresponding tgz file to the target hard drive (preferable location is `/opt/intel`).

To activate **Intel® Media Server Studio – Video Quality Caliper** after installation you need:

- If you have Intel Media Server Studio license file then put the file in the following default directory:

  as root: `/opt/intel/licenses`

  as current user: `~/intel/licenses`

- If there is no Intel Media Server Studio license file available please:
  1. Log in to the Intel® Registration Center by entering your login ID and password. You will see a list of all your products.
  2. For each product, you will see the product name, component names (if applicable), a link to the latest version available for download, and the posted date of the latest update.
  3. Clicking **Intel® Media Server Studio – Professional Edition** will take you to the subscription history page where you will be able to download the latest version. On the bottom, you will find the serial number, support status, and links to manage the license and renew your subscription.

4. If you want to download the license file or resend it to your email account, click the Manage link under the Admin column to go to the Manage License page. You will see two icons on the License File header 'Download license file' and 'Resend license file to my email'. If you chose the second option, you will receive an email with the license file as an attachment. [Note: If you have installed a 2016 product you may have more than one license file per product].

If you have any questions on licensing, visit the Licensing FAQ page.

To install **Intel® VTune™ Amplifier** you need to extract corresponding tar.gz files and run install.sh. Please refer to corresponding release notes for details.

Installation Folders

Intel® Media Server Studio – Professional 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, FEI, HEVC Decoder & Encoder, Metrics Monitor.
`/opt/intel/opencl`	Default location of Intel® Media Server Studio – SDK for OpenCL™ Applications.
`/opt/intel/vtune_amplifier_2018`	Default location of Intel® VTune™ Amplifier

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

Known Limitations

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

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