

# Intel® Media Server Studio 2015 R6 – Professional Edition for Linux\* Release Notes

[Overview](#)

[What's New](#)

[System Requirements](#)

[Package Contents](#)

[Installation](#)

[Installation Folders](#)

[Known Limitations](#)

[Legal Information](#)

## 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 2015 – Graphics driver*
- *Intel® Media Server Studio 2015 – SDK* (hereinafter referred to as "SDK") is designed for optimizing datacenter and embedded media applications for Linux server operating systems to utilize Intel® Iris™ and Intel® HD Graphics hardware acceleration capabilities.
- *Intel® Media Server Studio 2015 – OpenCL™ Code Builder* assists with creating, building, debugging, and analyzing OpenCL applications.
- *Intel® Media Server Studio 2015 – Metrics Monitor* provides access to a set of GPU metrics.
- *Intel® Media Server Studio 2015 – Audio Decoder and Encoder* (hereinafter referred to as "Audio") is a dedicated library for audio codec software processing.
- *Intel® Media Server Studio 2015 – 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 2015 – Premium Telecine Interlace Reverser* (hereinafter referred to as "PTIR") is a development library that exposes the media acceleration capabilities of Intel platforms for video deinterlacing/inverse telecine processing.

\*Other names and brands may be claimed as the property of others.

OpenCL and the OpenCL logo are trademarks of Apple Inc. used by permission by Khronos.

Page 1 of 8

Copyright © 2015, Intel Corporation

- *Intel® Media Server Studio 2015 – Video Quality Caliper* is a graphical utility for objective and visual quality inspection of encoded or uncompressed videos
- *Intel® VTune™ Amplifier XE* 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 2015 – Samples* show how to use different SDK features.

## What's New

The Intel® Media Server Studio 2015 R4 – Professional Edition for Linux\* includes the following components:

- Intel® Media Server Studio 2015 – Graphics driver, version 16.4.2.39163
- Intel® Media Server Studio 2015 – SDK, version 6.0.16043166.166
- Intel® Media Server Studio 2015 – OpenCL™ Code Builder 2015 R6
- Intel® Media Server Studio 2015 – Audio Decoder and Encoder, version 6.0.1604345.45
- Intel® Media Server Studio 2015 – HEVC Decoder and Encoder, version 1.0.6
- Intel® Media Server Studio 2015 – Premium Telecine Interlace Reverser, version 1.2.0
- Intel® Media Server Studio 2015 – Video Quality Caliper, version 1.7.0
- Intel® VTune™ Amplifier XE 2015 Update 4.1
- Intel® Media Server Studio 2015 – Samples, version 6.0.16043175.175; a subset of samples binaries is available as part of this package. The latest version of samples package (with all samples binaries and corresponding source code) could be downloaded from [Intel\(R\) Media Server Studio 2015 Support](#).

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

- the Intel® Media Server Studio 2015 – SDK Release Notes  
`<studio-extract-dir>/<sdk-extract-dir>/media_server_studio_sdk_release_notes.pdf`
- the Intel® Media Server Studio 2015 – OpenCL™ Code Builder Release Notes  
<https://software.intel.com/en-us/articles/mss-code-builder-release-notes>
- the Intel® Media Server Studio 2015 – Metrics Monitor Manual  
`<studio-extract-dir>/<sdk-extract-dir>/metricsmon-man.pdf`

\*Other names and brands may be claimed as the property of others.

- the Intel® Media Server Studio 2015 – Audio Decoder and Encoder Release Notes:  
<studio-extract-dir>/<audio-extract-dir>/release\_notes\_audio.pdf
- the Intel® Media Server Studio 2015 – HEVC Decode & Encode Release Notes:  
<studio-extract-dir>/<hevc-extract-dir>/media\_server\_studio\_hevc\_release\_notes.pdf
- the Intel® Media Server Studio 2015 – Premium Telecine Interlace Reverser Release Notes:  
<studio-extract-dir>/<ptir-extract-dir>/plugins/media\_server\_studio\_ptir\_release\_notes.pdf
- the Intel® Media Server Studio 2015 – Video Quality Caliper Release Notes:  
<studio-extract-dir>/<caliper-extract-dir>/Video\_Quality\_Caliper\_Release\_Notes.pdf
- the Intel® VTune™ Amplifier XE Release Notes:  
<studio-extract-dir>/<vtune-extract-dir>/release\_notes\_amplifier\_linux.pdf

## System Requirements

### Hardware

The following processor models are supported:

The following processor models are supported:

- Intel® Xeon® Processor E3-128x v4
- 5th Generation Intel Core™ Processors with Intel Iris™ Pro Graphics, Intel Iris™ Graphics or Intel HD Graphics (5500, 6000, 6100, 6200).
- Intel® Xeon® Processor E3-128x v3
- 4<sup>th</sup> Generation Intel Core™ Processors with Intel Iris™ Pro Graphics, Intel Iris™ Graphics or Intel HD Graphics 4200+ Series (chipset compatibility is usually not an issue for Core™ processors.)

**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 2015 – Professional Edition for Linux\* package includes the following components:

\*Other names and brands may be claimed as the property of others.

OpenCL and the OpenCL logo are trademarks of Apple Inc. used by permission by Khronos.

Component	Description
SDK2015Production16.4.2.1.tar.gz	Intel® Media Server Studio 2015 – Driver & SDK & Metrics Monitor package.
intel_code_builder_for_opencl_mss_<ocl-version>.tar.gz	Intel® Media Server Studio 2015 – OpenCL™ Code Builder package.
MediaSamples_Linux_bins_<id>.tar.gz	Intel® Media Server Studio 2015 – Samples package includes the following binaries: <ul style="list-style-type: none"> <li>• Decoding Sample</li> <li>• Encoding Sample</li> <li>• Multi Transcoding Sample</li> <li>• VPP Sample,</li> </ul> test streams and README file with a link to full Samples package download.
Audio2015.tar.gz	Intel® Media Server Studio 2015 – Audio Decoder & Encoder package.
HEVC2015.tar.gz	Intel® Media Server Studio 2015 – HEVC Decoder & Encoder package.
PTIR2015.tar.gz	Intel® Media Server Studio 2015 – Premium Telecine Interlace Reverser package.
VideoQualityCaliper2015.tar.gz	Intel® Media Server Studio 2015 – Video Quality Caliper package.
vtune_amplifier_xe_2015_update4.1.tar.gz	Intel® VTune™ Amplifier XE package.
media_server_studio_professional_release_notes.pdf Intel(R) Media Server Studio EULA.pdf redistrib.txt site_license_materials.txt third_party_programs.txt	Intel® Media Server Studio 2015 documentation: this file, EULA, EULA's accompanying files, Getting Started Guide

\*Other names and brands may be claimed as the property of others.

OpenCL and the OpenCL logo are trademarks of Apple Inc. used by permission by Khronos.

Page 4 of 8

Copyright © 2015, Intel Corporation

## Installation

Installation of Intel® Media Server Studio 2015 – Professional Edition for Linux\* requires full administrative rights.

Extract files from the MediaServerStudioProfessional2015R6.tar.gz file to the target hard drive.

**Intel® Media Server Studio 2015 – 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 2015 – Metrics Monitor** will be installed together with Intel® Media Server Studio 2015 – Driver & SDK.

To install **Intel® Media Server Studio 2015 – Samples** you need to extract corresponding tar.gz file to the target hard drive.

To install **OpenCL™ Code Builder** you need to extract corresponding tgz file and run install.sh. Installer will guide installation process, please follow it.

If you installed Intel® Media Server Studio 2015 – Driver & SDK using package for Generic OS you could see the following “Missing Critical Prerequisite(s)” issued by OpenCL Code Builder installer:

```
The following libraries required for installation are missing:  
- libOpenCL.so.1() (64bit)  
- libOpenCL.so.1(OPENCL_1.0) (64bit)  
- libOpenCL.so.1(OPENCL_1.2) (64bit)  
To install libOpenCL* libraries, please install OpenCL™ runtime  
for Intel® CPU device package.
```

First please make sure all required libraries are available on your system:

```
$ find / -name libOpenCL.so.1*  
/usr/lib64/libOpenCL.so.1  
/usr/lib64/libOpenCL.so.1.2
```

And then run the following command in <OCL-Code-Builder-extract-dir> folder:

```
$ rpm -ivh --nodeps rpm/*.rpm
```

To install **Intel® Media Server Studio 2015 – Audio Decoder & Encoder** you need to extract corresponding tar.gz file to the target hard drive (preferable location is <sdk-install-dir>). Please make sure you replace mfxaudio.h file delivered with SDK package (<sdk-install-dir>/include) with one delivered with this package.

\*Other names and brands may be claimed as the property of others.

To install **Intel® Media Server Studio 2015 – 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 2015 – Premium Telecine Interlace Reverser** you need to extract corresponding tar.gz file to the target hard drive in the location where SDK installed. Please ensure you installed SDK before PTIR installation. Please create backup copy of `<sdk-install-dir>/plugins/plugins.cfg` (if any) before PTIR installation; after PTIR installed you need to copy backup content to a new `<sdk-install-dir>/plugins/plugins.cfg`.

To install **Intel® Media Server Studio 2015 – Video Quality Caliper** you need to extract corresponding tar.gz file to the target hard drive (preferable location is `/opt/intel`).

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

## Installation Folders

Intel® Media Server Studio 2015 – Professional Edition for Linux\* components will be installed in the following locations by default:

Component	Description
<code>/opt/intel/mediasdk</code>	Default location of Intel® Media Server Studio 2015 – SDK, Audio Decoder & Encoder, HEVC Decoder & Encoder, Premium Telecine Interlace Reverser, Metrics Monitor.
<code>/opt/intel/opencl-1.2-sdk-&lt;ocl-version&gt;</code>	Default location of Intel® Media Server Studio 2015 – OpenCL™ Code Builder.
<code>/opt/intel/vtune_amplifier_xe_2015</code>	Default location of Intel® VTune™ Amplifier XE 2015

Intel® Media Server Studio 2015 – 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.

\*Other names and brands may be claimed as the property of others.

## Legal Information

THIS DOCUMENT CONTAINS INFORMATION ON PRODUCTS IN THE DESIGN PHASE OF DEVELOPMENT.

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting [Intel's Web Site](#).

MPEG is an international standard for video compression/decompression promoted by ISO. Implementations of MPEG CODECs, or MPEG enabled platforms may require licenses from various entities, including Intel Corporation.

Intel, the Intel logo, Intel Core are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

### **Optimization Notice**

Intel's compilers may or may not optimize to the same degree for non-Intel microprocessors for optimizations that are not unique to Intel microprocessors. These optimizations include SSE2, SSE3, and SSSE3 instruction sets and other optimizations. Intel does not guarantee the availability, functionality, or effectiveness of any optimization on microprocessors not manufactured by Intel.

\*Other names and brands may be claimed as the property of others.

OpenCL and the OpenCL logo are trademarks of Apple Inc. used by permission by Khronos.

Page 7 of 8

Copyright © 2015, Intel Corporation

Microprocessor-dependent optimizations in this product are intended for use with Intel microprocessors. Certain optimizations not specific to Intel microarchitecture are reserved for Intel microprocessors. Please refer to the applicable product User and Reference Guides for more information regarding the specific instruction sets covered by this notice.

Notice revision #20110804