**RAW to ACES Utility for Centos 7(Redhat Linux)**

**Prerequisites**

**CMake**

Download from <https://cmake.org/files/v3.12/cmake-3.12.1.tar.gz>

tar zxvf cmake-3.12.1.tar.gz && cd cmake-3.12.1

./bootstrap

make

sudo make install

**IlmBase**

Download from

1. <http://mirror.centos.org/centos/7/os/x86_64/Packages/ilmbase-devel-1.0.3-7.el7.x86_64.rpm>
2. <http://mirror.centos.org/centos/7/os/x86_64/Packages/ilmbase-1.0.3-7.el7.x86_64.rpm>

*Do the following:*

rpm -Uvh ilmbase-1.0.3-7.el7.x86\_64.rpm

rpm -Uvh ilmbase-devel-1.0.3-7.el7.x86\_64.rpm

**C++ Compiler**

Download from <http://ftp.mirrorservice.org/sites/sourceware.org/pub/gcc/releases/gcc-7.3.0/gcc-7.3.0.tar.gz>

tar zxvf gcc-7.3.0.tar.gz  
cd gcc-7.3.0  
./configure  
make  
sudo make install  
  
( If you get any pre-requisite error, please download and install those in a similar way)

**ACES Container**

From the root source directory

Download the clone from https://github.com/miaoqi/aces\_container.git

cd aces\_container

git checkout feature/windowsBuildSupport

mkdir build && cd build

cmake ..

make

sudo make install

**Boost**

Download from

1. <http://mirror.centos.org/centos/7/os/x86_64/Packages/boost-1.53.0-27.el7.x86_64.rpm>
2. <http://mirror.centos.org/centos/7/os/x86_64/Packages/boost-devel-1.53.0-27.el7.x86_64.rpm>

rpm -Uvh boost-1.53.0-27.el7.x86\_64.rpm

rpm -Uvh boost-devel-1.53.0-27.el7.x86\_64.rpm

**Ceres Solver**

***Install gflags***

Download from http://dl.fedoraproject.org/pub/epel/7/x86\_64/Packages/g/gflags-2.1.1-6.el7.x86\_64.rpm

rpm -Uvh gflags-2.1.1-6.el7.x86\_64.rpm

Download from http://dl.fedoraproject.org/pub/epel/7/x86\_64/Packages/g/gflags-devel-2.1.1-6.el7.x86\_64.rpm

rpm -Uvh gflags-devel-2.1.1-6.el7.x86\_64.rpm

***Install google-glog***

Download from http://dl.fedoraproject.org/pub/epel/7/x86\_64/Packages/g/glog-0.3.3-8.el7.x86\_64.rpm

rpm -Uvh glog-0.3.3-8.el7.x86\_64.rpm

Download from http://dl.fedoraproject.org/pub/epel/7/x86\_64/Packages/g/glog-devel-0.3.3-8.el7.x86\_64.rpm

rpm -Uvh glog-devel-0.3.3-8.el7.x86\_64.rpm

***Install Atlas BLAS***

Download from

1. <http://mirror.centos.org/centos/7/os/x86_64/Packages/atlas-3.10.1-12.el7.x86_64.rpm>
2. <http://mirror.centos.org/centos/7/os/x86_64/Packages/atlas-devel-3.10.1-12.el7.x86_64.rpm>

rpm -Uvh atlas-3.10.1-12.el7.x86\_64.rpm

rpm -Uvh atlas-devel-3.10.1-12.el7.x86\_64.rpm

***Install Eigen3*** (eigen3-devel - A lightweight C++ template library for vector and matrix math)

Download from http://dl.fedoraproject.org/pub/epel/7/x86\_64/Packages/e/eigen3-devel-3.2.5-2.el7.noarch.rpm

rpm -Uvh eigen3-devel-3.2.5-2.el7.noarch.rpm

***Install Suitesparse*** (suitesparse - A collection of sparse matrix libraries)

Download from

1. <http://mirror.centos.org/centos/7/os/x86_64/Packages/suitesparse-4.0.2-10.el7.x86_64.rpm>
2. <http://mirror.centos.org/centos/7/os/x86_64/Packages/suitesparse-devel-4.0.2-10.el7.x86_64.rpm>

rpm -Uvh suitesparse-4.0.2-10.el7.x86\_64.rpm

rpm -Uvh suitesparse-devel-4.0.2-10.el7.x86\_64.rpm

***Install Ceres*** (ceres-solver-devel - A non-linear least squares minimizer)

Download from http://dl.fedoraproject.org/pub/epel/7/x86\_64/Packages/c/ceres-solver-1.11.0-1.el7.x86\_64.rpm

rpm -Uvh ceres-solver-1.11.0-1.el7.x86\_64.rpm

Download from http://dl.fedoraproject.org/pub/epel/7/x86\_64/Packages/c/ceres-solver-devel-1.11.0-1.el7.x86\_64.rpm

rpm -Uvh ceres-solver-devel-1.11.0-1.el7.x86\_64.rpm

**Install LibRaw**

Download from

1. <http://mirror.centos.org/centos/7/os/x86_64/Packages/jasper-libs-1.900.1-31.el7.x86_64.rpm>
2. <http://mirror.centos.org/centos/7/os/x86_64/Packages/lcms2-2.6-3.el7.x86_64.rpm>
3. <http://mirror.centos.org/centos/7/os/x86_64/Packages/lcms2-devel-2.6-3.el7.x86_64.rpm>

rpm -Uvh jasper-libs-1.900.1-31.el7.x86\_64.rpm

rpm -Uvh lcms2-2.6-3.el7.x86\_64.rpm

rpm -Uvh lcms2-devel-2.6-3.el7.x86\_64.rpm

Download from https://www.libraw.org/data/LibRaw-0.19.0.tar.gz

tar zxvf LibRaw-0.19.0.tar.gz

./configure

make

sudo make install

*Do the following next..*

cd

cd ../usr/local/lib

cp \*.so /usr/lib64

**Install rawtoaces**

From the root source directory

Download clone from https://github.com/ampas/rawtoaces

cd rawtoaces

mkdir build && cd build

cmake ..

make

sudo make install

*Do the following next ..*

cd build/src

make install

cd build/unittest

make install

cd build/lib

make install

cd

cd ../usr/local/lib

cp \*.so /usr/lib64

cp \*.so /usr/local/lib64

(If asked to replace files, say Yes)

Try running rawtoaces by doing the below:

**rawtoaces --help**