

Instructions to compile C++ plugins

On Windows

The following instructions assume that:

- You are using Visual Studio 2015.
- A [properly-patched Boost 1.55](#) is installed in `C:\boost_1_55_0`.
- [appleseed's dependency package](#) is installed in `C:\appleseed\appleseed-deps`.

Make sure to adapt them as required.

Open a Command Prompt inside a plugin's folder, then type:

- With an **end-user** release of appleseed:

```
mkdir build
cd build
cmake -G "Visual Studio 14 2015 Win64" -DAPPLESEED_INCLUDE_DIR=..\..\..\..\include -
DAPPLESEED_LIBRARY=..\..\..\..\lib\appleseed.lib -DBOOST_ROOT=C:\boost_1_55_0 -
DIMATH_INCLUDE_DIR=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\include -
DIMATH_MATH_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\Imath-2_2.lib -
DIMATH_IEX_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\Iex-2_2.lib -
DIMATH_HALF_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\Half.lib -
DOPENEXR_INCLUDE_DIR=C:\appleseed\appleseed-deps\stage\vc14\openexr-release\include -
DOPENEXR_IMF_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\openexr-release\lib\IlmImf-2_2.lib -
DOPENEXR_THREADS_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\IlmThread-
2_2.lib -DAPPLESEED_DEPS_STAGE_DIR=C:\appleseed\appleseed-deps\stage\vc14 ..
```

- With a **working copy** of the appleseed repository:

```
mkdir build
cd build
cmake -G "Visual Studio 14 2015 Win64" -DAPPLESEED_INCLUDE_DIR=..\..\..\..\..\src\appleseed -
DAPPLESEED_LIBRARY=..\..\..\..\..\lib\vc140\Ship\appleseed.lib -DBOOST_ROOT=C:\boost_1_55_0 -
DIMATH_INCLUDE_DIR=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\include -
DIMATH_MATH_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\Imath-2_2.lib -
DIMATH_IEX_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\Iex-2_2.lib -
DIMATH_HALF_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\Half.lib -
DOPENEXR_INCLUDE_DIR=C:\appleseed\appleseed-deps\stage\vc14\openexr-release\include -
DOPENEXR_IMF_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\openexr-release\lib\IlmImf-2_2.lib -
DOPENEXR_THREADS_LIBRARY=C:\appleseed\appleseed-deps\stage\vc14\ilmbase-release\lib\IlmThread-
2_2.lib -DAPPLESEED_DEPS_STAGE_DIR=C:\appleseed\appleseed-deps\stage\vc14 ..
```

Open the Visual Studio solution file (.sln file) that was generated in build and build the plugin in the configuration of your choice (Debug or Release).

On Linux and macOS

In a Bash shell, inside a plugin's directory, type:

- With an **end-user** release of appleseed:

```
mkdir build
cd build
cmake <TODO> ..
make
```

- With a **working copy** of the appleseed repository:

```
mkdir build
cd build
cmake <TODO> ..
make
```