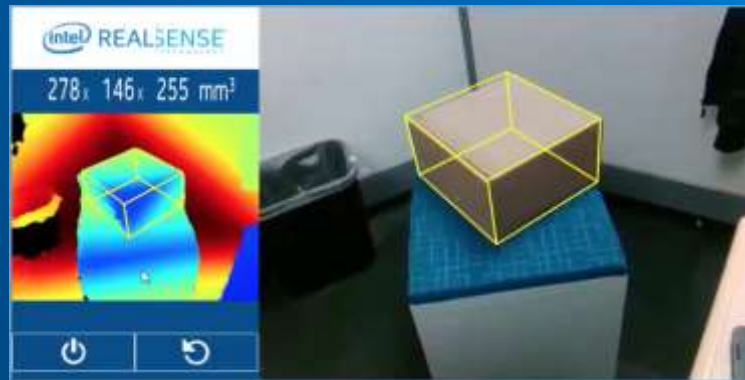




Intel® RealSense™ Box SDK 2018 Build Demonstration

Hon Pong (Gary) Ho
Intel RealSense Group

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Contents

This presentation will go over the steps to build Box SDK for Windows:

1. Repository

- a. <https://github.com/IntelRealSense/realsense-boxsdk.git>
- b. If you cannot access the above, please contact us.

2. Readme

- a. <https://github.com/IntelRealSense/realsense-boxsdk>
- b. A summary of the build process can be found on the website.

Prerequisites

You will need (or to install) the followings to complete the build process:

1. Access to <https://github.com/IntelRealSense/realsense-boxsdk>
2. Microsoft Windows 10
3. Microsoft Visual Studio 2015 or 2017
4. Git for Windows 2.15.1 or above
5. CMake 3.8 or above
6. Write permission to your “C:\temp” folder

Github.com

IntelRealSense / realSense-boxsdk Private

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Intel® RealSense™ Box Measurement Software

297 commits 1 branch 1 release 1 contributor

Branch: boxsdk New pull request

Create new file Upload files Find file Clone or download

File	Description	Last commit
boxsdk	boxsdk: install package name use time string	a month ago
cmake	boxsdk: example sdk app client CMakeLists	a month ago
doc	boxsdk: license documents	2 months ago
src	libSP cmake: option to selection particular SP version.	10 days ago
.gitmodules	boxsdk: use public librealSense src	10 days ago
CMakeLists.txt	boxsdk: librealSense-2-ll-3	10 days ago
README.md	Update README.md	10 days ago
build_boxsdk_vs2015_x64.bat	boxsdk: my-box-app build bat fix	10 days ago
build_boxsdk_vs2017_x64.bat	boxsdk: vs2017 build script duplicated -T option	10 days ago

hensong Update README.md Latest commit 64b7f613 10 days ago

Intel® RealSense™ Box Measurement SDK Windows

An extension to the Intel® RealSense™ SDK with box detection capability for Windows applications.

Pre-requisites

1. Intel® RealSense™ Depth Camera D410 / D415
2. Minimum Windows 10

Readme

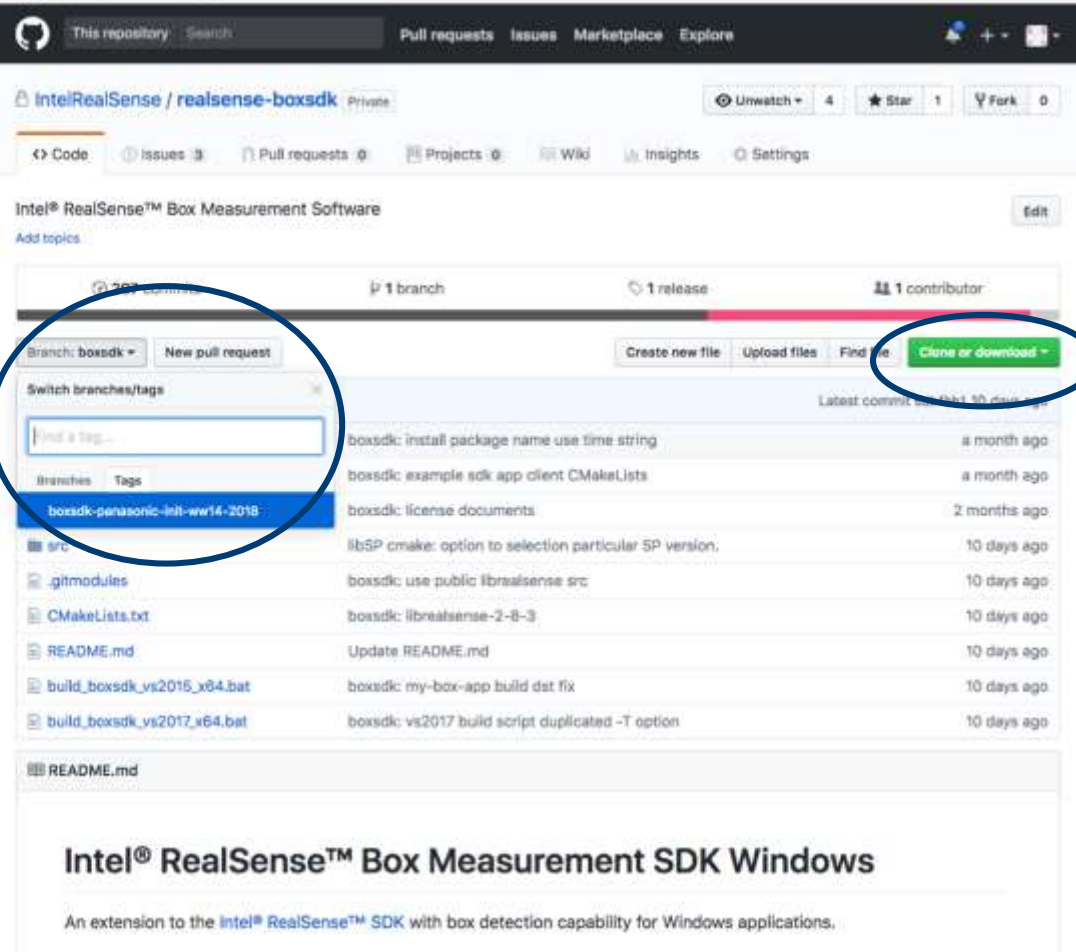
Summary of
build instructions



Download

1. Select version

Click branches / Tags
to select a specific
version



2. Download

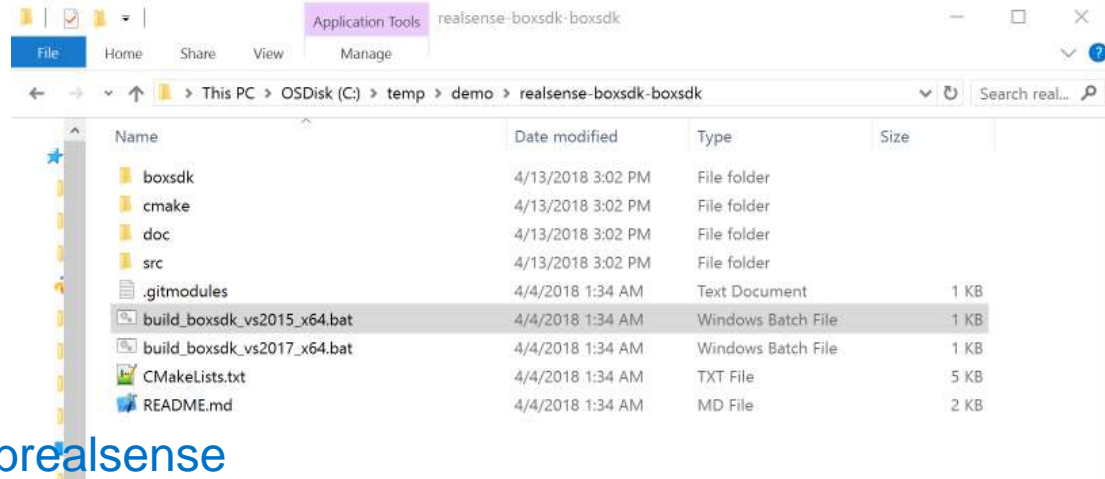
Click to get a zip
file of the source
code
(alternative to git
clone command)

CMake

After download completed:

1. Unzip the folder
2. Delete entire src/thirdparty/librealsense
3. For Visual Studio 2015:
→ Run *build_boxsdk_vs2015_x64.bat*
4. For Visual Studio 2017:
→ Run *build_boxsdk_vs2017_x64.bat*

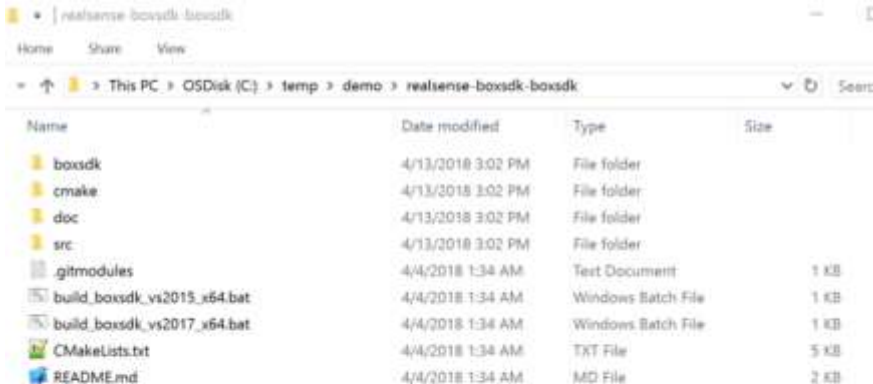
*Make sure your CMake and Git for Windows are installed before running.
*At any moment the script failed, delete the unzipped folder and restart.



CMake

The script will automatically:

1. Create a build folder in
C:\temp\boxsdk2
2. Download librealsense source code
3. Create and open measure.sln solution
4. Wait for boxsdk INSTALL build
completed
5. Create and open my-box-app.sln



```
build_boxsdk_vs2015_x64.bat

C:\temp\demo\realsense-boxsdk-boxsdk>set src_dir=C:\temp\demo\realsense-boxsdk-boxsdk\

C:\temp\demo\realsense-boxsdk-boxsdk>echo C:\temp\demo\realsense-boxsdk-boxsdk\
C:\temp\demo\realsense-boxsdk-boxsdk\

C:\temp\demo\realsense-boxsdk-boxsdk>set dst_dir=C:\temp\boxsdk2

C:\temp\demo\realsense-boxsdk-boxsdk>rmdir /S /Q C:\temp\boxsdk2
The system cannot find the file specified.

C:\temp\demo\realsense-boxsdk-boxsdk>mkdir C:\temp\boxsdk2

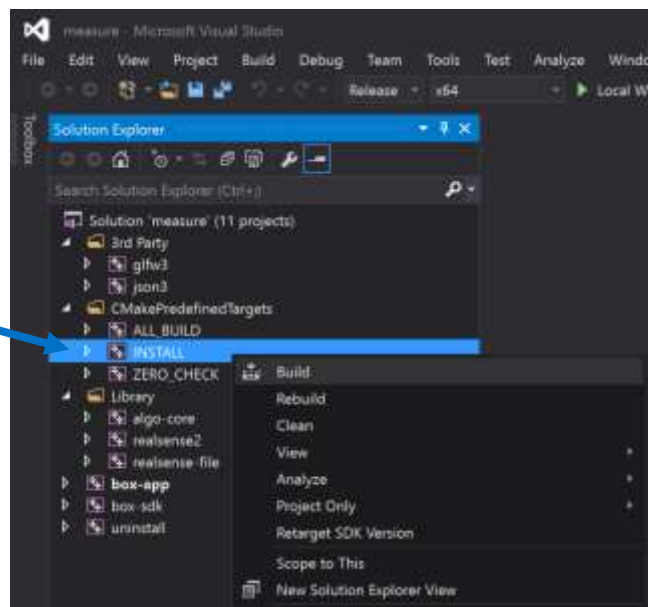
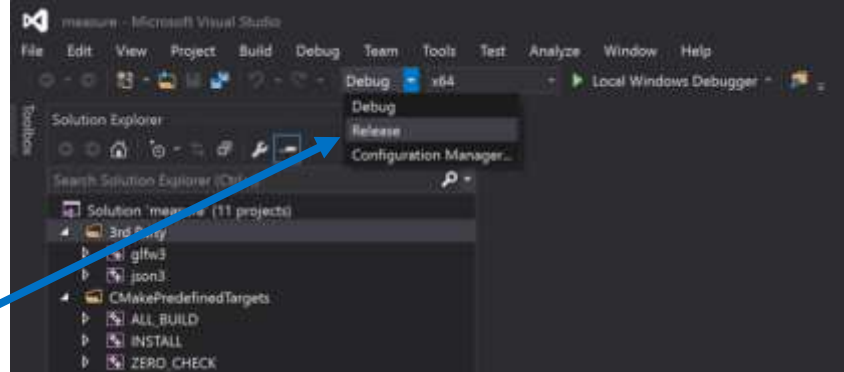
C:\temp\demo\realsense-boxsdk-boxsdk>pushd C:\temp\boxsdk2

C:\temp\boxsdk2>"C:\Program Files\CMake\bin\cmake.exe" -G "Visual Studio 14 2015 Win64"
C:\temp\demo\realsense-boxsdk-boxsdk\
-- Selecting Windows SDK version 10.0.16299.0 to target Windows 10.0.14393.
-- The C compiler identification is MSVC 19.0.24215.1
-- The CXX compiler identification is MSVC 19.0.24215.1
-- Check for working C compiler: C:/Program Files (x86)/Microsoft Visual Studio 14.0/VC/
-- Check for working C compiler: C:/Program Files (x86)/Microsoft Visual Studio 14.0/VC/
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: C:/Program Files (x86)/Microsoft Visual Studio 14.0/V
-- Check for working CXX compiler: C:/Program Files (x86)/Microsoft Visual Studio 14.0/V
```


measure.sln

When measure.sln opened in Visual Studios 2015 / 2017, please:

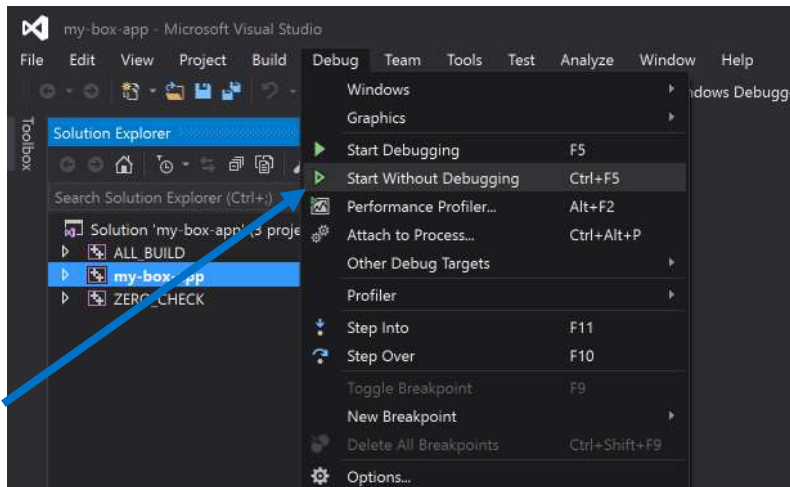
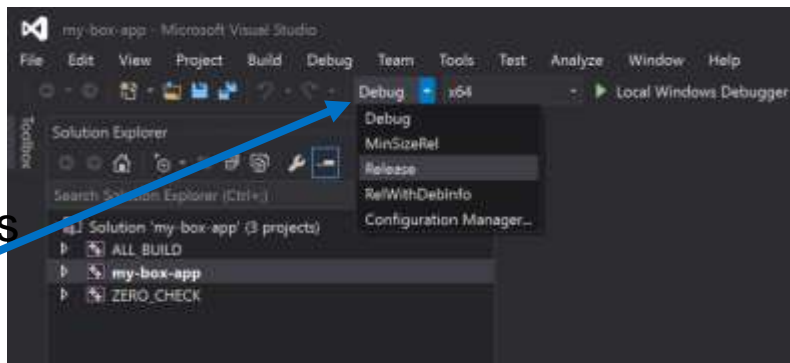
1. Select the Debug / Release configuration
2. Right Click INSTALL project and Build
3. Wait until build succeeded
4. Close Visual Studio



my-box-app.sln

When my-box-app.sln opened in Visual Studio 2015 / 2017, please:

1. Select the Debug / Release configuration
2. (Optional) connect your Intel® RealSense™ depth camera
3. Select Debug → Start Without Debugging
4. Close Visual Studio after build succeeded



Build Products

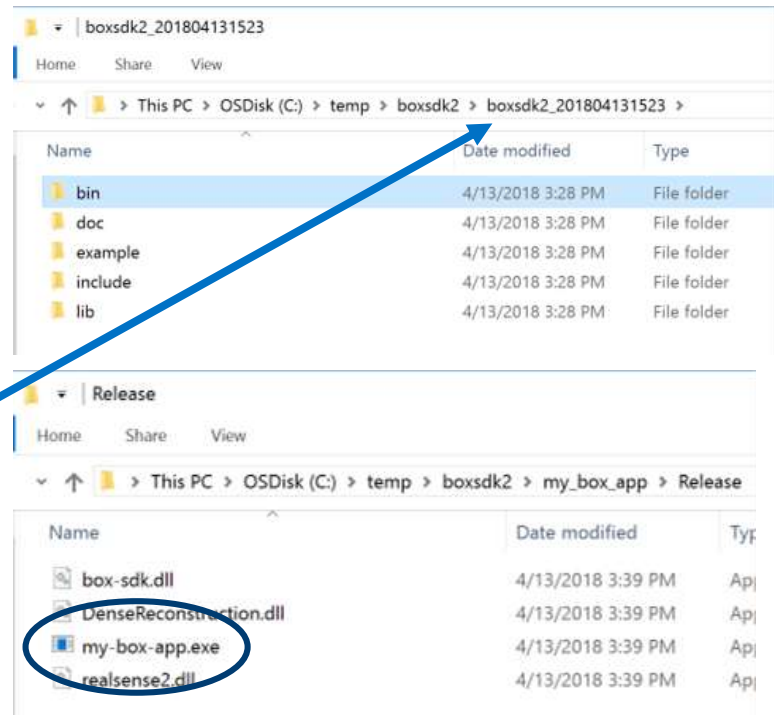
Two major outputs will be:

1. A boxsdk build with date and time in folder

C:\temp\boxsdk2\boxsdk2_20xxxxxxxxxx

1. A boxsdk sample application in folder

C:\temp\boxsdk2\my_box_app\Release\my-box-app.exe



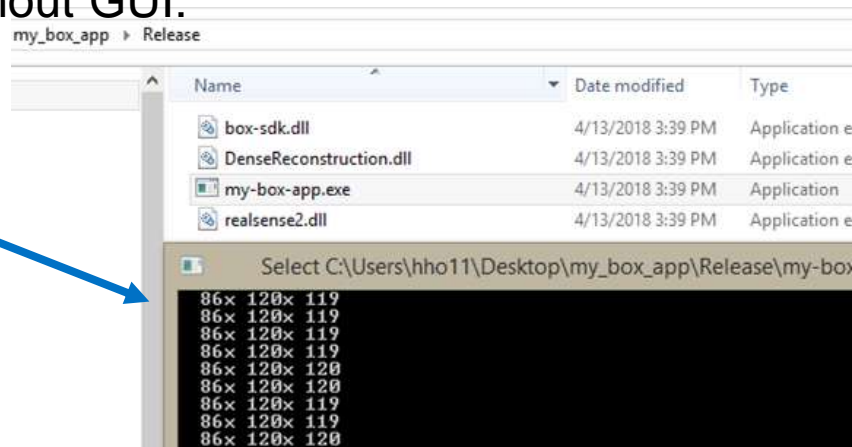
Box SDK Sample (no GUI)

A simple boxsdk sample application is located in:

`C:\temp\boxsdk2\my_box_app\Release\my-box-app.exe`

It is a simple box detection program without GUI:

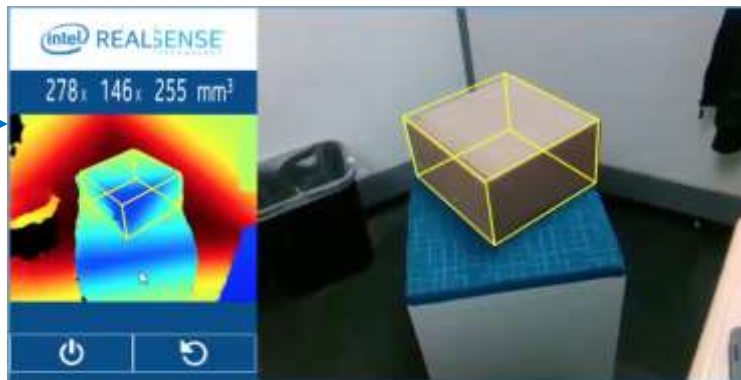
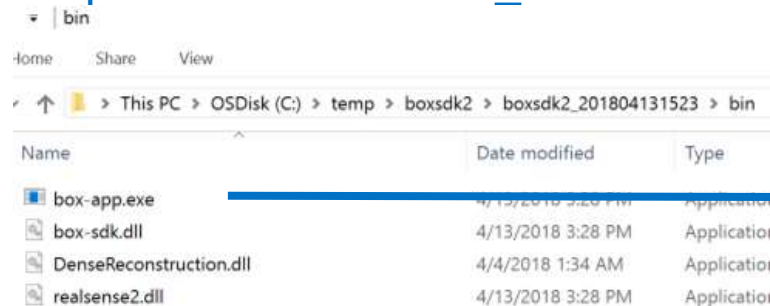
It will show the dimension of
first detected box in millimeter.



Box SDK Demo Application (with GUI)

A demo application will be automatically included in boxsdk

`C:\temp\boxsdk2\boxsdk2_20xxxxxxxxxx\bin\box-app.exe`



Q & A

1. Why are there two (sample) applications?

box-app.exe: With GUI, it shows the full capability of the box SDK with better visualization and it is packaged together with the box SDK. However, the code is less readable and GUI dependency is not necessary for developers.

my-box-app.exe: Without GUI, the code of this application is easy to read and with minimum dependency for developers. The application is built as a 3rd party program that use pre-built box SDK in a different folder tree. So it is a good reference for 3rd party developers.

