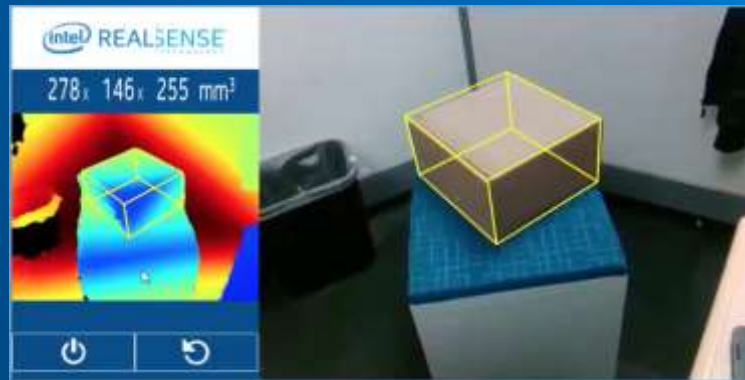# Intel® RealSense™ Box SDK 2018 Build Demonstration

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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

Readme

Summary of build instructions

Download

1. Select version
Click branches / Tags to select a specific version
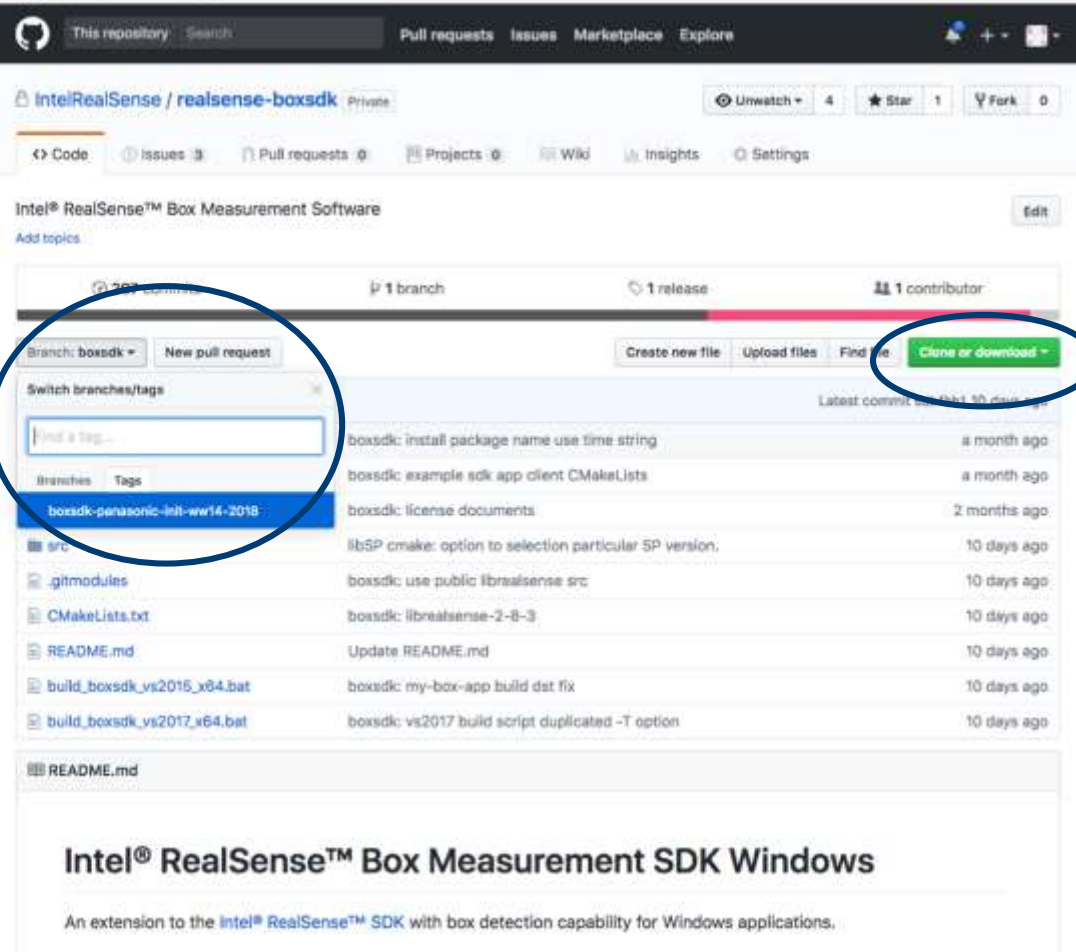
2. Download
Click to get a zip file of the source code
(alternative to git clone command)

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:
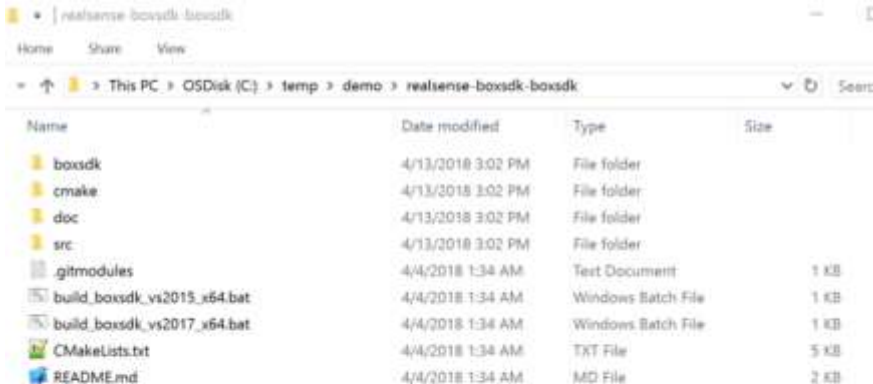
   → Run *build_boxsdk_vs2017_x64.bat*

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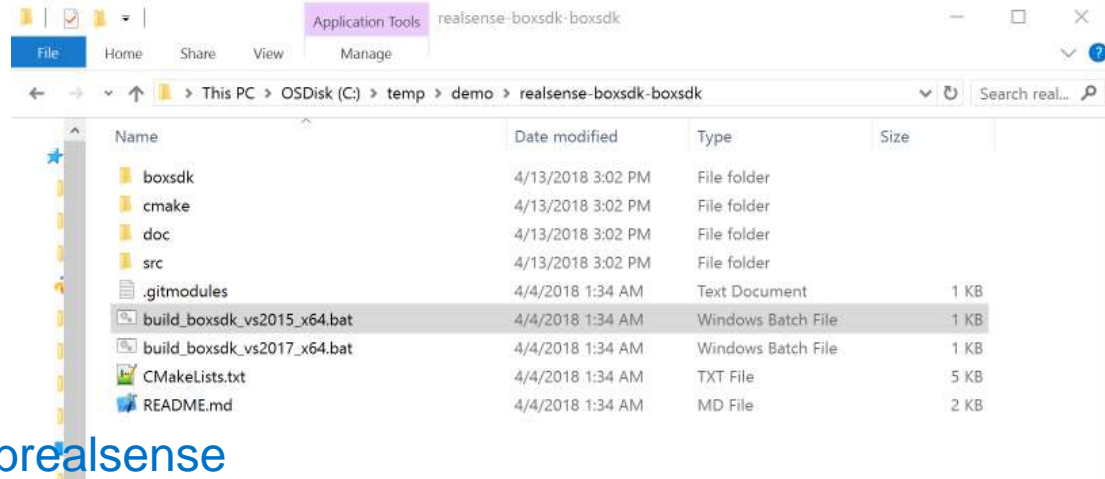
CMake

The script will <u>automatically</u>:

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

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
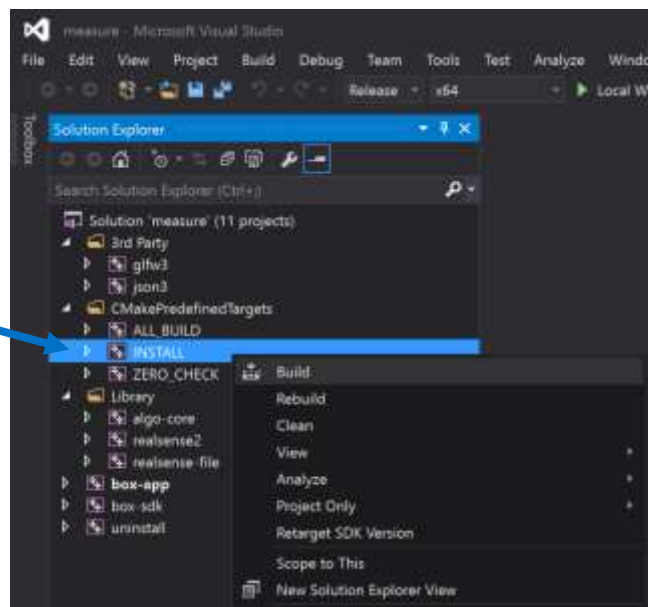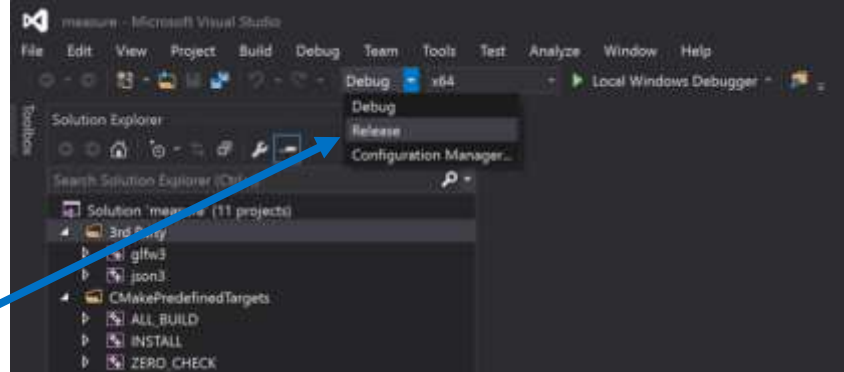
my-box-app.sln

When my-box-app.sln opened in Visual Studios 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
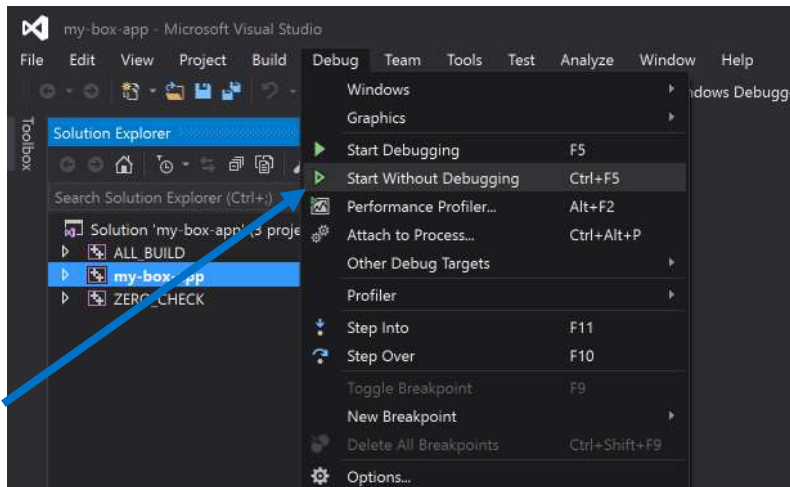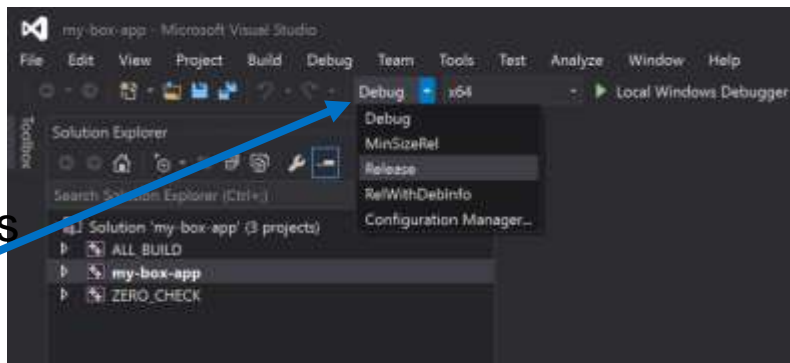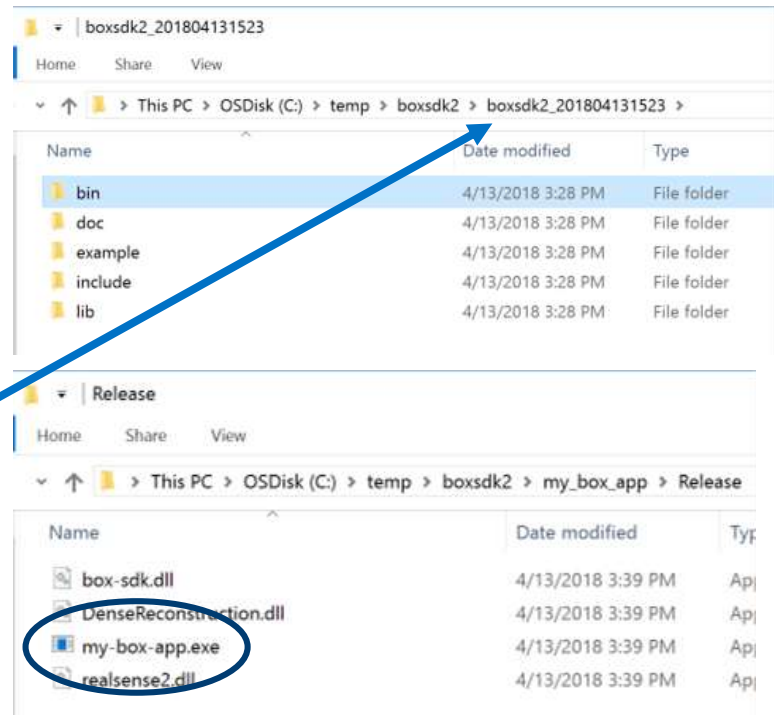
Build Products

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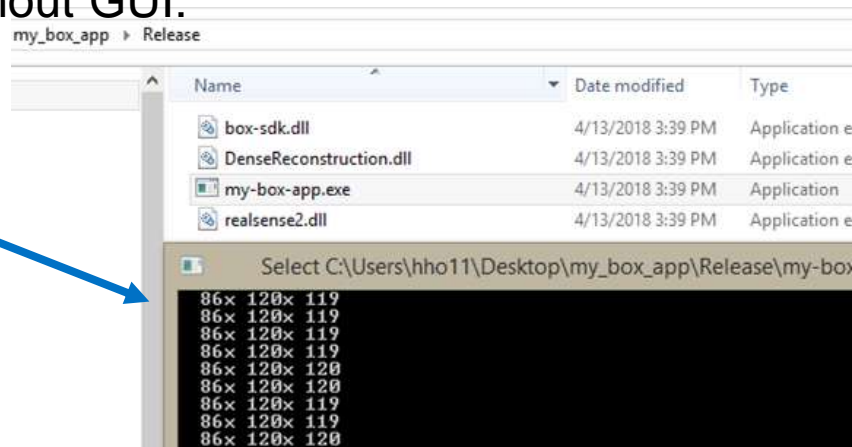
   C:\temp\boxsdk2\my_box_app\Release\my-box-app.exe

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.

my_box_app ▸ Release			
Name		Date modified	Type
box-sdk.dll		4/13/2018 3:39 PM	Application e
DenseReconstruction.dll		4/13/2018 3:39 PM	Application e
my-box-app.exe		4/13/2018 3:39 PM	Application
realsense2.dll		4/13/2018 3:39 PM	Application e

Select C:\Users\hho11\Desktop\my_box_app\Release\my-box

```
86x 120x 119
86x 120x 119
86x 120x 119
86x 120x 119
86x 120x 120
86x 120x 120
86x 120x 119
86x 120x 119
86x 120x 120
```

Box SDK Demo Application (with GUI)

A demo application will be automatically included in boxsdk

C:\temp\boxsdk2\boxsdk2_20xxxxxxxxx\bin\box-app.exe
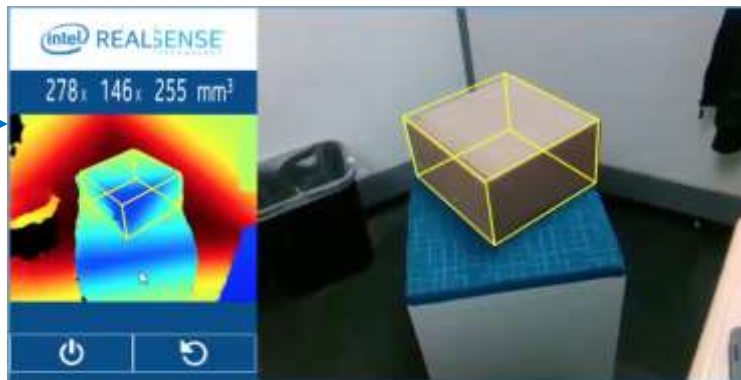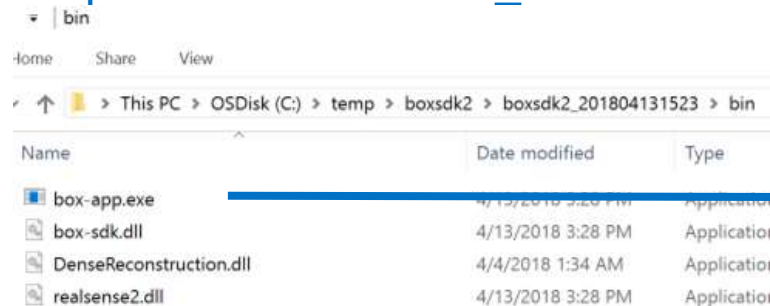
Q & A

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.

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