**Building The Code**

First, install all of the prerequisites below.

**Prerequisites**

* Microsoft Visual Studio 2015 (if you don’t have one of the paid editions, you can download the free Visual Studio Express Edition for Desktop, below)

<https://www.visualstudio.com/en-us/products/visual-studio-express-vs.aspx>

* Microsoft .NET Framework 4.5.1

<http://www.microsoft.com/en-us/download/details.aspx?id=40779>

* Microsoft DirectX SDK

<http://www.microsoft.com/en-us/download/details.aspx?id=6812>

* Visual Studio 2015 Installer Projects Add-In

<https://visualstudiogallery.msdn.microsoft.com/f1cc3f3e-c300-40a7-8797-c509fb8933b9>

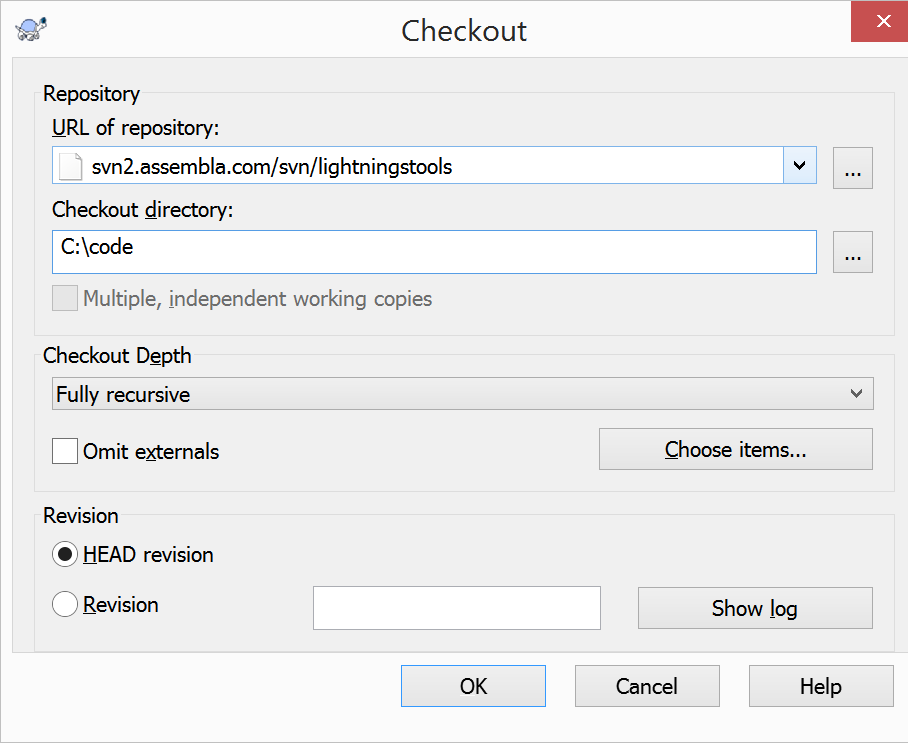
* TortoiseSVN

<http://tortoisesvn.net/downloads.html>

**Downloading the Code**

Download all of the Lightning’s Tools source code by following these steps:

1. Create a folder on your hard drive to hold the code (recommend: **C:\code**)
2. Right-click on the folder and select SVN -> Check Out
3. In the dialog box that pops up, enter the following exactly as you see it below:

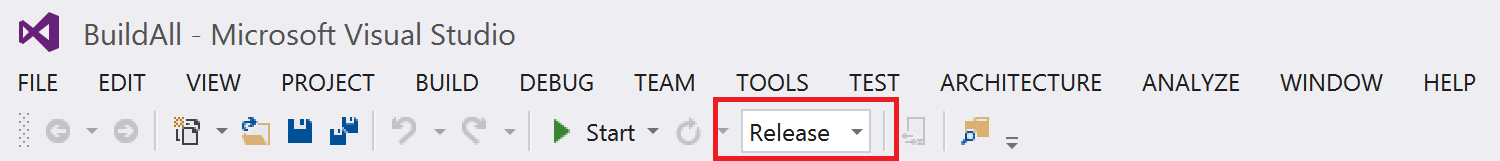


Click OK. This will download all of the code from the Lightning’s Tools and Utilities repository.

**Building the Code using Visual Studio 2015**

Next, launch Visual Studio 2015 from the Start Menu, and select **File->Open->Project/Solution**. Navigate to **C:\code\trunk\MasterBuild** and select **BuildAll.sln**

Ensure that the drop down menu to the right of the “Start” button on the toolbar says “Release”. If it says “Debug”, change it to “Release”.



Next, From the **Build** menu, select **Build Solution**. This will compile all of the code and will build the installers for all projects that have an installer.

After building, the installers will be located in the following directories:

**MFD Extractor**C:\code\trunk\MFDExtractor\MFDExtractorSetup\Release

**CPD**C:\code\trunk\F16CPD\F16CpdSetup\Release

**Building the Code from the Command LIne**

If you would like to build projects from the command line, there are several batch files included in the /MasterBuild project folder which provide for this capability.

**Build Single Project**

**Build.bat** *<path to .sln file of project you wish to build>*

**Build All Projects**

**BuildAll.bat**

**Build Single Project (and also build any related Installer Projects)**

**BuildWithInstallers.bat** *<path to .sln file of Visual Studio solution you wish to build>*

**Build All Projects (and also build all Installer Projects)**

**BuildAllWithInstallers.bat**

***NOTE:***

**In order to build installer projects at the command line, you will need to import a specific Registry Key into your Windows Registry.** In the /MasterBuild project folder, you will find a .reg file containing the required registry key/value to import.

**/MasterBuild/EnableCommandLineInstallerBuilds.reg**

If you do not import this key, command line builds of installer projects will fail with errors.