

So you think you can compile/build LabVIEW... 😊

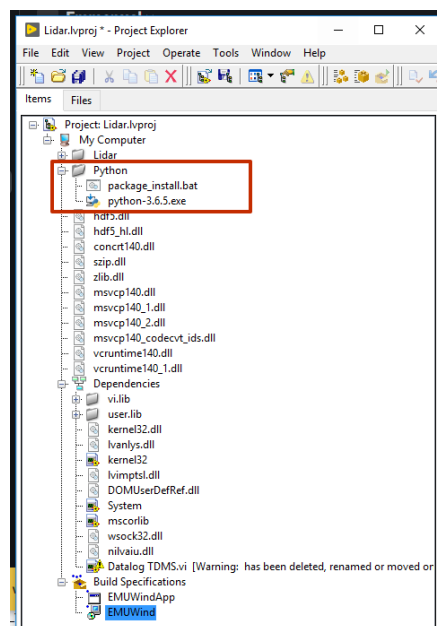
You will need...

- LabVIEW Professional Development License
- All Sourcecode organised within a LabVIEW Project

When in doubt refer to NI documentation: <https://www.ni.com/docs/en-US/bundle/labview/page/building-and-distributing-applications.html>

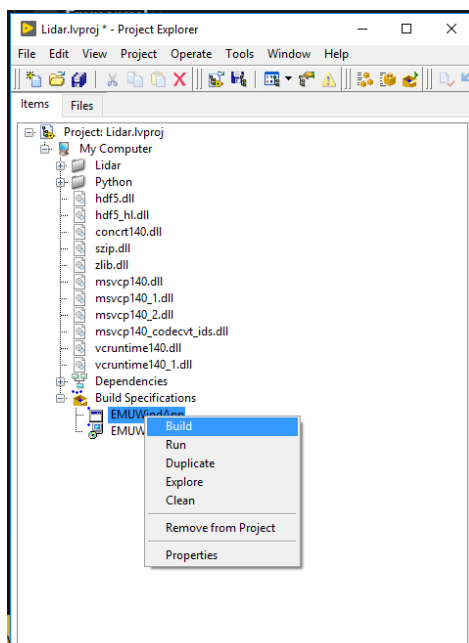
You can compile/build either anything created under Build Specifications.

- Note: If your installer needs other installers include them within the project.

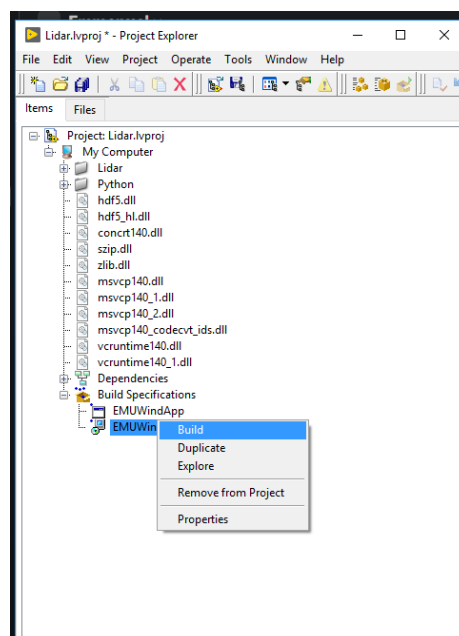


Python Installer and bat script needed for installer included within the project

- Creating and building installers and executables are located in Build Specifications in the Project Explorer. By right-click of Build specifications, creation of new executables and Installer are possible



Build executable



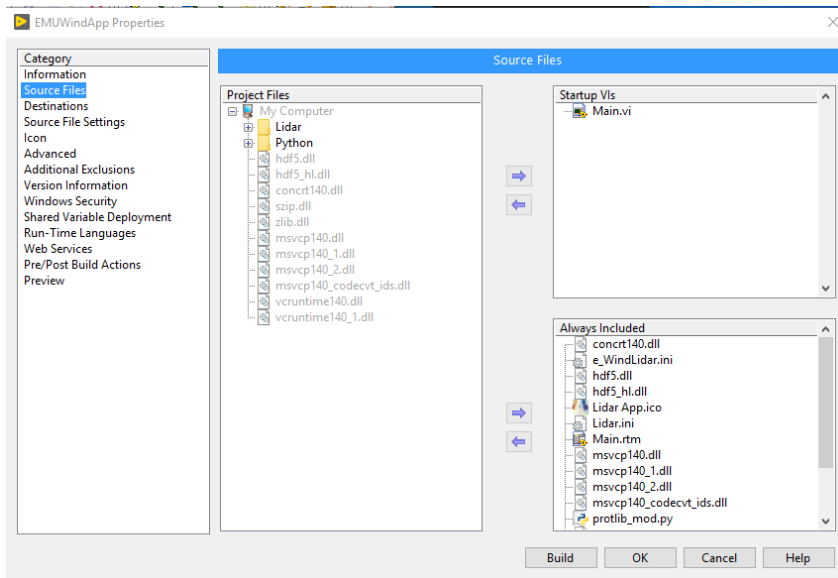
Build installer

- **Customizing executable**

Executables run on machines with installed LabVIEW Runtime or LabVIEW Software.

- To customize properties of installer or executable, use “Properties” menu in Project Explorer for executable

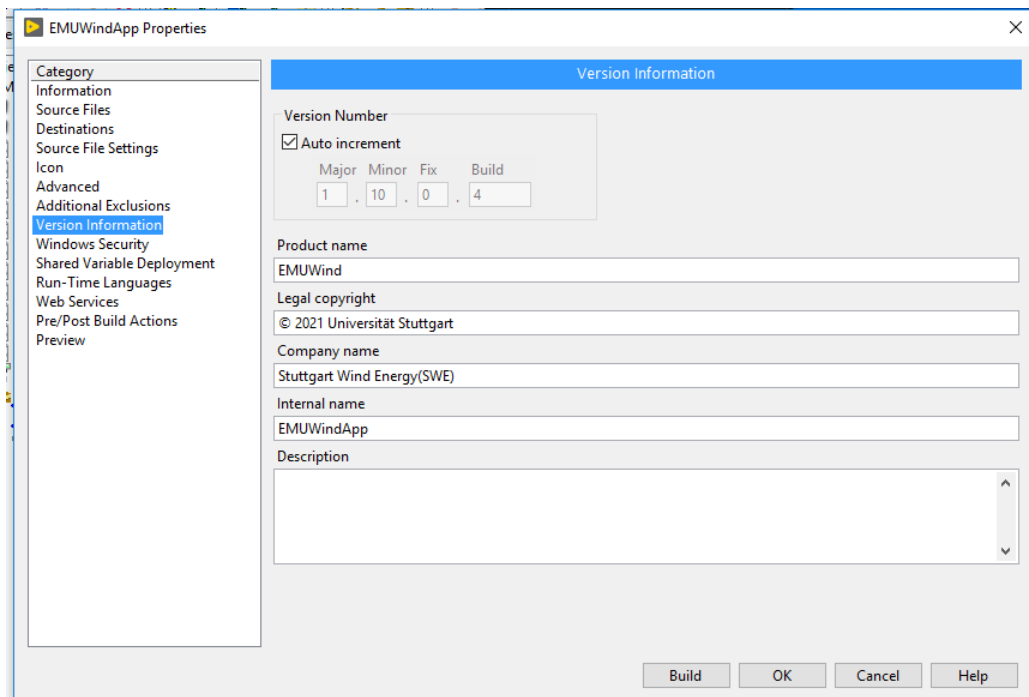
All source files necessary for executables can be customised in “Source Files”



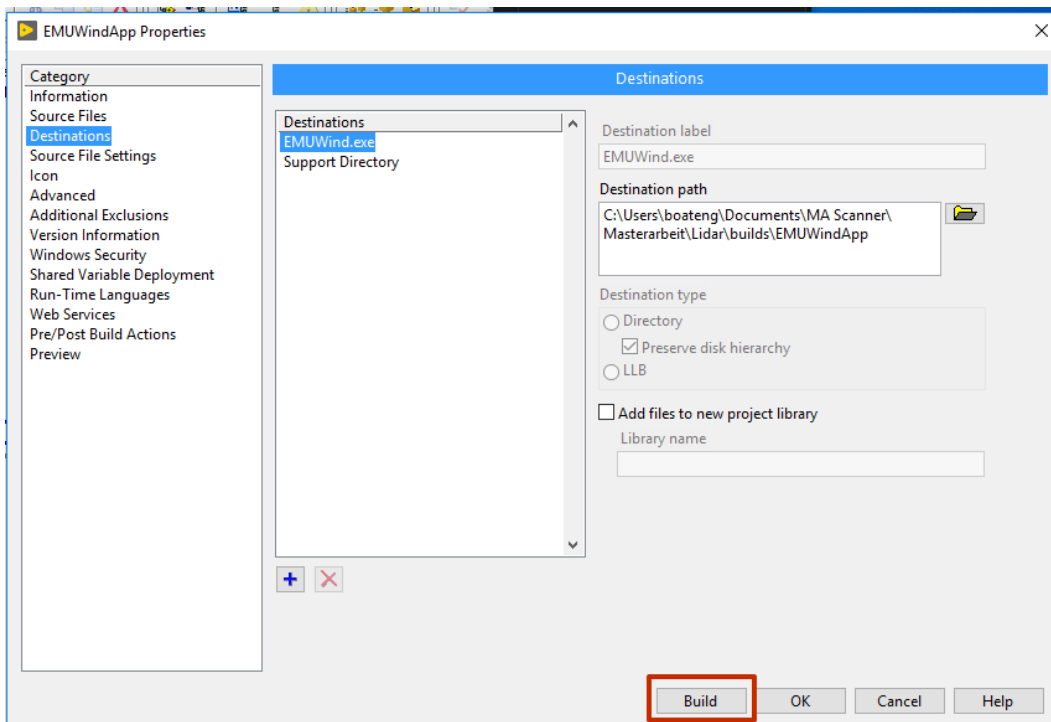
All DLLs used by non-standard libraries installed via VI Package Manager need to be within the project and included as Source Files.

Else, VI functions made using non-standard libraries will not work in built application

Version Information changes can be done automatically or manually by deselecting Auto-Increment



Customize the destination path of your application to be and BUILD



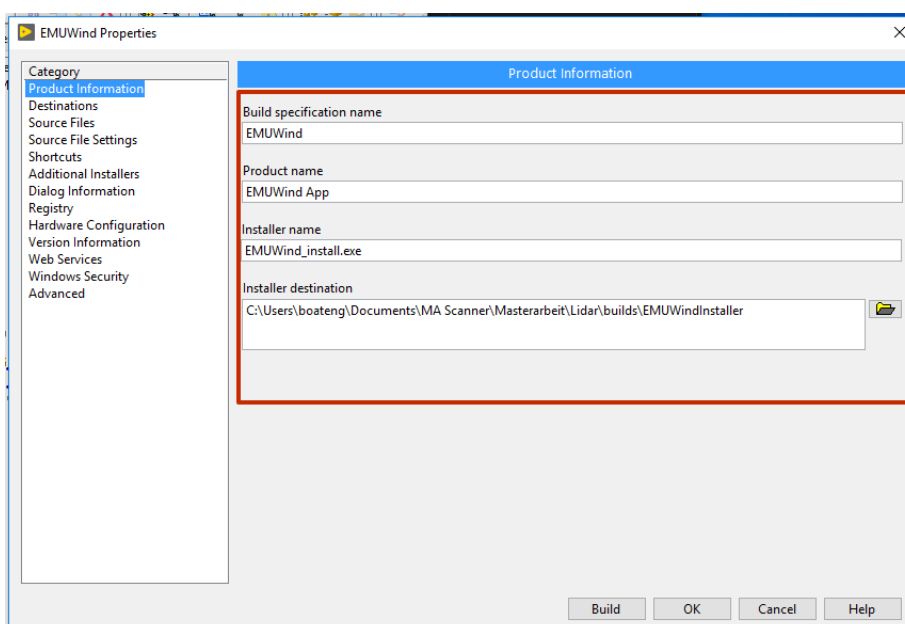
- *Note: every build auto increments the version information*

Refer to LabVIEW Documentation for other functions listed in the category

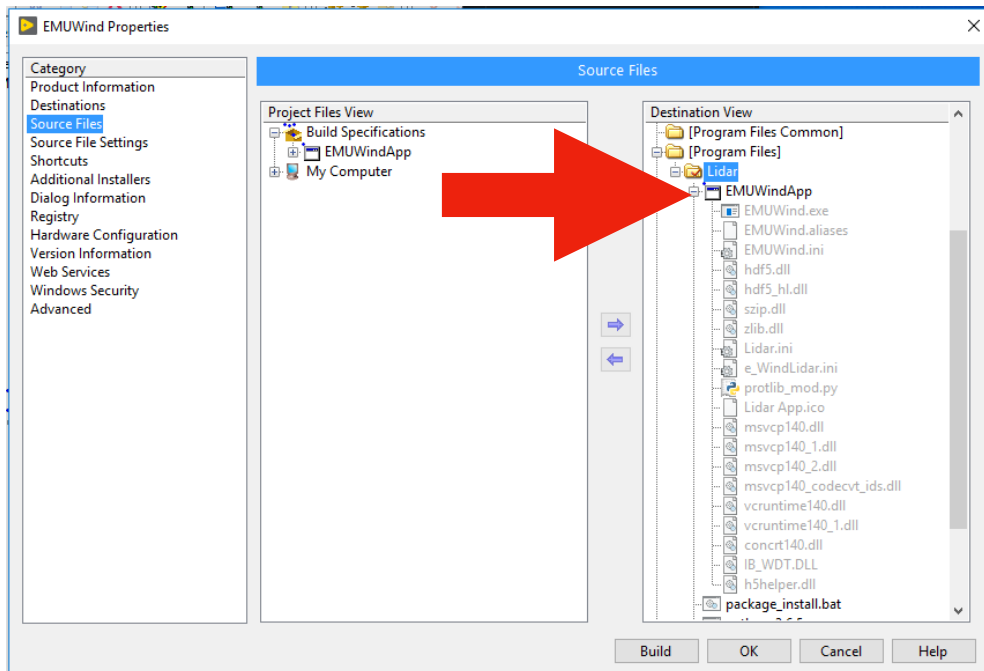
- **Customizing installers (a few pointers)**

Installers install your built application on any machine without the need for installing LabVIEW IDE.

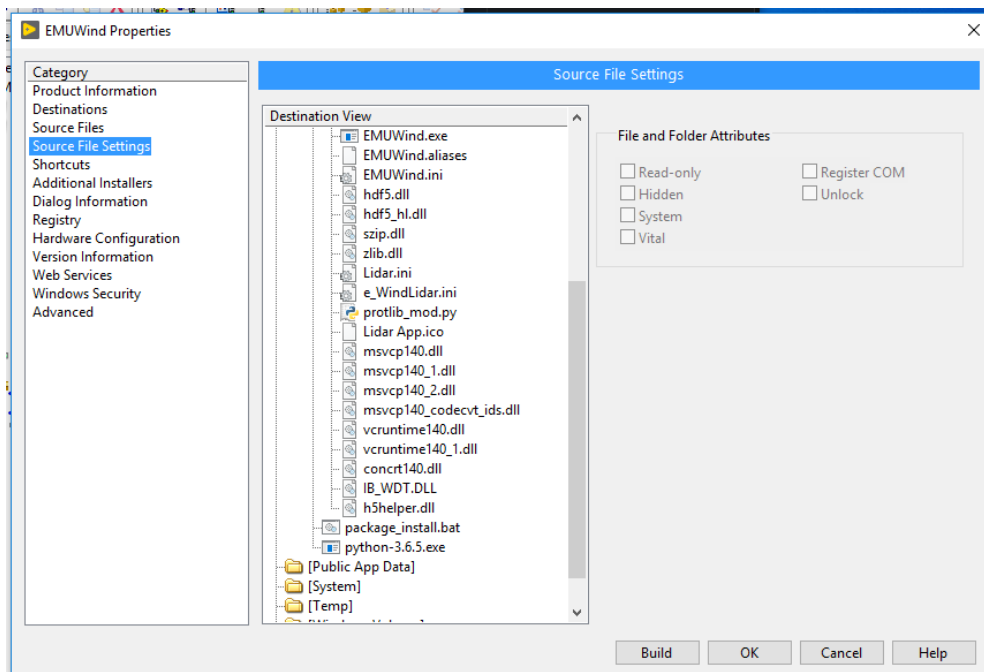
- Select name of installer, application name and destination path of the installer after building in Product Information view



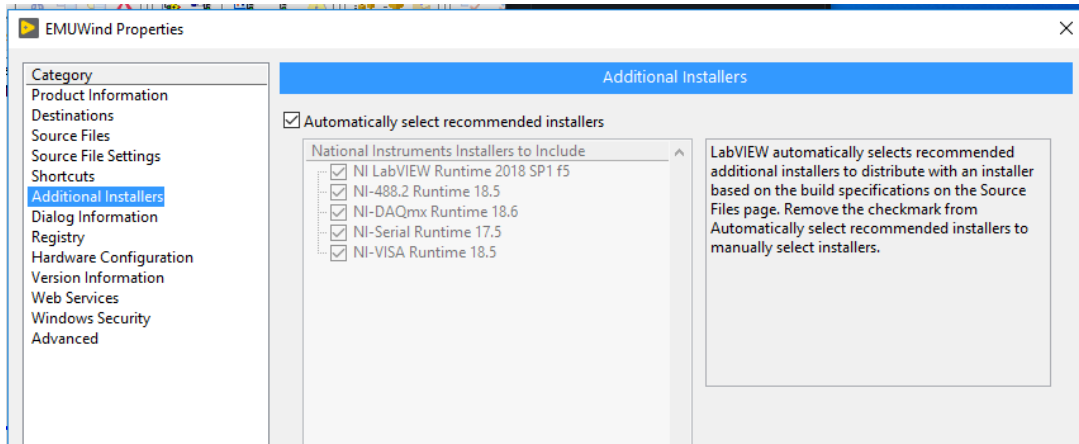
- All files that need to be included within the installer for your application should be selected in Source Files. This includes other installers such as Python installers. **If the executable Source Files does not include needed files, they need to be added manually.**



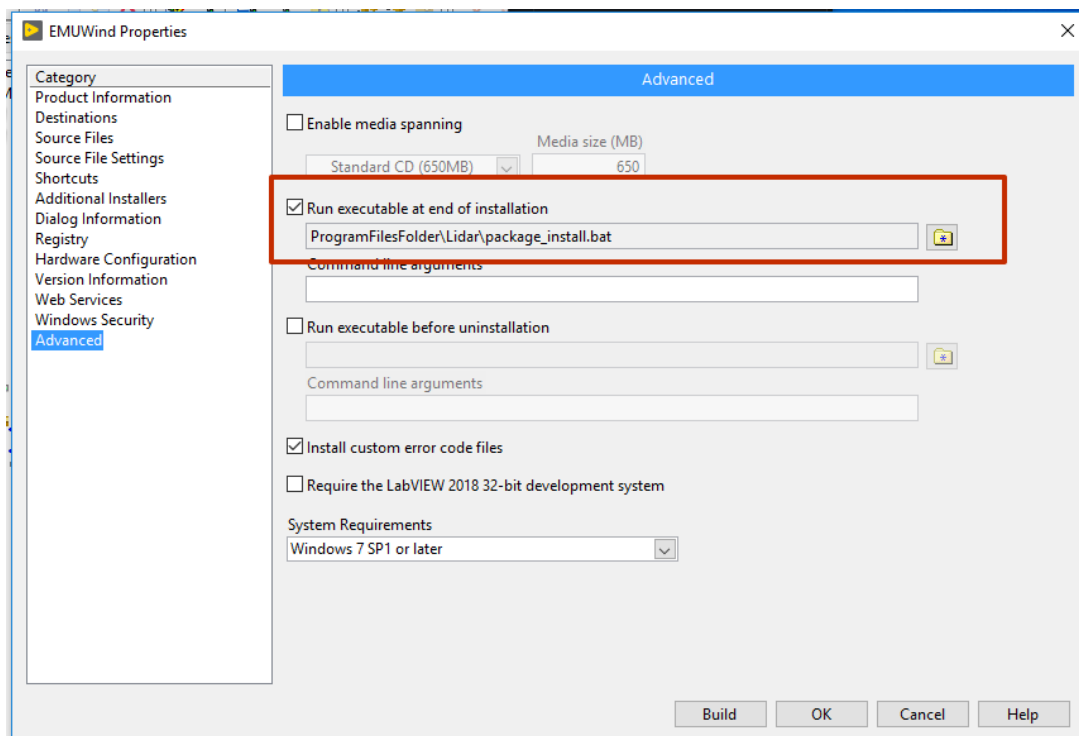
Customize individual source file settings and attributes if desired. **Hide all files that user should not see in Program Files**



Additional installers category is solely for LabVIEW Runtime. LabVIEW Runtime allows running applications without installing the full LabVIEW IDE or Software. Ideally use recommended automatic setting from National Instruments. Unless you know what you are doing. For non-standard function libraries, check the needed runtime in NI Documentation if it is not installed



In the Advanced Menu, you can include scripts or files that need to be run at the start or end of the installation of the application. *package_install.bat is a shell script created to install Python libraries “numpy” and “socket” used within executable /application for the program functionality. The script auto-deletes after installation is completed.*



Refer to LabVIEW Documentation for other functions listed in the category