# User

After building boost there are 3 types of files which I need to locate so that I can copy them to bin, lib and include folders of my mingw64 folder. Where are these 3 types of boost files?

# Bing

After building Boost, the files are typically located in the following directories:

1. **Library Files (.lib, .a, .so, .dll, .dylib)**: These files are usually located in the stage/lib directory of your Boost root directory[**1**](https://askubuntu.com/questions/263461/where-is-my-boost-lib-file)[**2**](https://devicetests.com/where-is-my-boost-lib-file).
2. **Include Files (.hpp, .h)**: These files are located in the boost directory inside your Boost root directory[**1**](https://askubuntu.com/questions/263461/where-is-my-boost-lib-file).
3. **Binary Files**: These are the compiled executables from the Boost libraries and are typically located in the bin.v2 directory inside your Boost root directory.

Please replace "Boost root directory" with the actual path where you have built Boost. If you have installed Boost using a package manager, the locations might be different. For example, on a typical Linux system, library files might be under /usr/lib or /usr/lib64, and include files under /usr/include[**1**](https://askubuntu.com/questions/263461/where-is-my-boost-lib-file).

Remember to adjust your project settings to include these paths for headers and libraries. If you're using CMake, you can use find\_package(Boost REQUIRED) and then include\_directories(${Boost\_INCLUDE\_DIRS}) and target\_link\_libraries(your\_target ${Boost\_LIBRARIES}) to set up the paths correctly. If you're not using CMake, you'll need to consult your build system's documentation on how to set include paths and link libraries.

Please note that the exact locations can vary based on your Boost version, build configuration, and operating system. If you can't find the files, you might need to rebuild Boost and ensure that the build process completes without errors.

Source(s)

1. [libraries - Where is my boost lib file? - Ask Ubuntu](https://askubuntu.com/questions/263461/where-is-my-boost-lib-file)

2. [Where is my Boost lib file? | DeviceTests](https://devicetests.com/where-is-my-boost-lib-file)

3. [c++ - My program can not find the boost library - Stack Overflow](https://stackoverflow.com/questions/4145519/my-program-can-not-find-the-boost-library)

# User

But I am on Windows not linux

# Bing

I apologize for the confusion. On Windows, after building Boost, the files are typically located in the following directories:

1. **Library Files (.lib, .dll)**: These files are usually located in the stage/lib directory of your Boost root directory[**1**](https://stackoverflow.com/questions/65357626/cmake-cannot-find-boost-on-windows).
2. **Include Files (.hpp, .h)**: These files are located in the boost directory inside your Boost root directory[**1**](https://stackoverflow.com/questions/65357626/cmake-cannot-find-boost-on-windows).
3. **Binary Files**: These are the compiled executables from the Boost libraries and are typically located in the bin.v2 directory inside your Boost root directory[**1**](https://stackoverflow.com/questions/65357626/cmake-cannot-find-boost-on-windows).

Please replace "Boost root directory" with the actual path where you have built Boost. For example, if you have built Boost in C:/local/boost\_1\_73\_0, then your library files would be in C:/local/boost\_1\_73\_0/stage/lib, include files in C:/local/boost\_1\_73\_0/boost, and binary files in C:/local/boost\_1\_73\_0/bin.v2[**1**](https://stackoverflow.com/questions/65357626/cmake-cannot-find-boost-on-windows).

Remember to adjust your project settings to include these paths for headers and libraries. If you're using CMake, you can use find\_package(Boost REQUIRED) and then include\_directories(${Boost\_INCLUDE\_DIRS}) and target\_link\_libraries(your\_target ${Boost\_LIBRARIES}) to set up the paths correctly[**1**](https://stackoverflow.com/questions/65357626/cmake-cannot-find-boost-on-windows). If you're not using CMake, you'll need to consult your build system's documentation on how to set include paths and link libraries.

Please note that the exact locations can vary based on your Boost version, build configuration, and operating system. If you can't find the files, you might need to rebuild Boost and ensure that the build process completes without errors[**1**](https://stackoverflow.com/questions/65357626/cmake-cannot-find-boost-on-windows).

Source(s)

1. [c++ - CMake cannot find Boost on Windows - Stack Overflow](https://stackoverflow.com/questions/65357626/cmake-cannot-find-boost-on-windows)

2. [Where is my Boost lib file? | DeviceTests](https://devicetests.com/where-is-my-boost-lib-file)

3. [c++ - My program can not find the boost library - Stack Overflow](https://stackoverflow.com/questions/4145519/my-program-can-not-find-the-boost-library)

4. [How to compile Boost library with Visual Studio 2022 ( Preview 3)](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3)

5. <https://www.boost.org/users/history/version_1_79_0.html>

# User

But my bin.v2 folder contains folders like this check, libs, etc standalone and tools and files like this config.log, project-cache.jam, test-symlink, etc. so no binary files as you mentioned above.

# Bing

I apologize for the confusion. The bin.v2 directory in Boost contains intermediate files generated during the build process[**3**](https://stackoverflow.com/questions/8077652/cmake-doesnt-find-boost-libraries). These include object files, which are not the final binary files that you would use in your application.

The final binary files, such as DLLs on Windows, are typically located in the stage/lib directory[**1**](https://stackoverflow.com/questions/16065275/boost-build-lib-directory-not-created-after-running-bjam-install). These are the files you would need to link against in your application.

Here's the corrected information:

1. **Library Files (.lib, .dll)**: These files are usually located in the stage/lib directory of your Boost root directory[**1**](https://stackoverflow.com/questions/16065275/boost-build-lib-directory-not-created-after-running-bjam-install).
2. **Include Files (.hpp, .h)**: These files are located in the boost directory inside your Boost root directory[**1**](https://stackoverflow.com/questions/16065275/boost-build-lib-directory-not-created-after-running-bjam-install).
3. **Intermediate Files**: These are the compiled object files and other intermediate files from the Boost libraries. They are typically located in the bin.v2 directory inside your Boost root directory[**3**](https://stackoverflow.com/questions/8077652/cmake-doesnt-find-boost-libraries).

Please replace "Boost root directory" with the actual path where you have built Boost. For example, if you have built Boost in C:/local/boost\_1\_73\_0, then your library files would be in C:/local/boost\_1\_73\_0/stage/lib, include files in C:/local/boost\_1\_73\_0/boost, and intermediate files in C:/local/boost\_1\_73\_0/bin.v2[**1**](https://stackoverflow.com/questions/16065275/boost-build-lib-directory-not-created-after-running-bjam-install).

Remember to adjust your project settings to include these paths for headers and libraries. If you're using CMake, you can use find\_package(Boost REQUIRED) and then include\_directories(${Boost\_INCLUDE\_DIRS}) and target\_link\_libraries(your\_target ${Boost\_LIBRARIES}) to set up the paths correctly[**1**](https://stackoverflow.com/questions/16065275/boost-build-lib-directory-not-created-after-running-bjam-install). If you're not using CMake, you'll need to consult your build system's documentation on how to set include paths and link libraries.

Please note that the exact locations can vary based on your Boost version, build configuration, and operating system. If you can't find the files, you might need to rebuild Boost and ensure that the build process completes without errors[**1**](https://stackoverflow.com/questions/16065275/boost-build-lib-directory-not-created-after-running-bjam-install).

Source(s)

1. [boost build: "lib" directory not created after running "bjam install"](https://stackoverflow.com/questions/16065275/boost-build-lib-directory-not-created-after-running-bjam-install)

2. [Boost Getting Started on Windows - 1.62.0 - Boost C++ Libraries](https://www.boost.org/doc/libs/1_62_0/more/getting_started/windows.html)

3. [windows - CMake doesn't find Boost libraries - Stack Overflow](https://stackoverflow.com/questions/8077652/cmake-doesnt-find-boost-libraries)

4. [Building Boost libraries for Visual Studio - CodeProject](https://www.codeproject.com/articles/11597/building-boost-libraries-for-visual-studio)

5. [c++ - Building a subset of boost in windows - Stack Overflow](https://stackoverflow.com/questions/439402/building-a-subset-of-boost-in-windows)

# User

On windows under stage/lib folder, I find files with extention.a and one folder named cmake which does not have dll files.

# Bing

I apologize for the confusion earlier. The .a files you're seeing in the stage/lib directory are static libraries[**5**](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html). Boost builds both static and dynamic libraries, and the type of library built can be configured during the build process[**5**](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html).

The dynamic libraries (.dll files on Windows) should also be in the stage/lib directory if they were built[**5**](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html). If you don't see any .dll files, it's possible that the build process was configured to only build static libraries[**5**](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html).

If you specifically need dynamic libraries (.dll files), you may need to adjust your build configuration and rebuild Boost[**5**](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html). The specific steps to do this can vary depending on how you're building Boost, but typically you would specify link=shared to build dynamic libraries[**5**](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html).

The cmake folder you're seeing likely contains CMake configuration files for Boost. These are used when building Boost with CMake, or when using Boost in a CMake project[**5**](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html).

I hope this clears up the confusion. If you have further questions or run into issues, feel free to ask! 😊

Source(s)

1. [Building Boost libraries for Visual Studio - CodeProject](https://www.codeproject.com/articles/11597/building-boost-libraries-for-visual-studio)

2. [c++ - Missing A Detail About Boost (.lib files) - Stack Overflow](https://stackoverflow.com/questions/2775880/missing-a-detail-about-boost-lib-files)

3. [c++ - Missing boosts filesystem lib after build - Stack Overflow](https://stackoverflow.com/questions/30657277/missing-boosts-filesystem-lib-after-build)

4. [Compiling and linking Boost C++ libraries for Visual Studio ... - Medium](https://levelup.gitconnected.com/the-definite-guide-on-compiling-and-linking-boost-c-libraries-for-visual-studio-projects-c79464d7282d)

5. [Boost.Build tutorial - 1.62.0 - Boost C++ Libraries](https://www.boost.org/doc/libs/1_62_0/tools/build/tutorial.html)

6. [windows - How to make Boost DLLs accessible to an executable built with ...](https://stackoverflow.com/questions/7978333/how-to-make-boost-dlls-accessible-to-an-executable-built-with-cmake)

# User

Tell me whether I have to change anything inside bootstrap.sh file to build dlls?

# Bing

No, you don't need to modify the bootstrap.sh file to build DLLs. The bootstrap.sh (or bootstrap.bat on Windows) script is used to prepare the Boost build system[**1**](https://stackoverflow.com/questions/20676192/configure-boost-build-on-windows)[**2**](https://www.boost.org/doc/libs/1_80_0/tools/build/doc/html/index.html)[**3**](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3). It doesn't directly control what kind of libraries (static or dynamic) are built[**1**](https://stackoverflow.com/questions/20676192/configure-boost-build-on-windows)[**2**](https://www.boost.org/doc/libs/1_80_0/tools/build/doc/html/index.html)[**3**](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3).

To build dynamic libraries (DLLs) with Boost, you can specify link=shared when invoking b2[**1**](https://stackoverflow.com/questions/20676192/configure-boost-build-on-windows)[**2**](https://www.boost.org/doc/libs/1_80_0/tools/build/doc/html/index.html)[**3**](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3). Here's an example:

.\b2 link=shared

This command tells b2 to build shared libraries (which are DLLs on Windows). If you want to build both static and dynamic libraries, you can do so by specifying link=static,shared[**1**](https://stackoverflow.com/questions/20676192/configure-boost-build-on-windows)[**2**](https://www.boost.org/doc/libs/1_80_0/tools/build/doc/html/index.html)[**3**](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3).

Please note that you should run these commands in the Developer Command Prompt for your version of Visual Studio[**3**](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3). This ensures that b2 can find the necessary compiler and linker[**3**](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3).

I hope this helps! If you have any more questions, feel free to ask. 😊

Source(s)

1. [c++ - Configure boost build on windows - Stack Overflow](https://stackoverflow.com/questions/20676192/configure-boost-build-on-windows)

2. [B2 User Manual - 1.80.0 - Boost C++ Libraries](https://www.boost.org/doc/libs/1_80_0/tools/build/doc/html/index.html)

3. [How to compile Boost library with Visual Studio 2022 ( Preview 3)](https://stackoverflow.com/questions/68935077/how-to-compile-boost-library-with-visual-studio-2022-preview-3)

4. [c++ - Installing Boost to custom directory - Stack Overflow](https://stackoverflow.com/questions/54680708/installing-boost-to-custom-directory)

5. [How to install Boost with specified compiler (say GCC)](https://stackoverflow.com/questions/25346443/how-to-install-boost-with-specified-compiler-say-gcc)

6. <https://github.com/bfgroup/b2/discussions>

7. <https://www.bfgroup.xyz/b2/LICENSE.txt%29>

8. <https://www.boost.org/users/history/version_1_79_0.html>