

Installing NetBeans 8.0 on Windows 8/8.1

0. Introduction

In this document, you will learn how to install the NetBeans IDE software version 8.0 and the MinGW compiler on Windows 8 and 8.1. You will need reliable access to the internet to download some files, as well as at least 147 megabytes (62 MB for the minimal C++ NetBeans installation and 85 MB for the MinGW compiler) available for the downloads. You will also need administrative access to Windows to install programs and change system settings. Total installation time is approximately 15-45 minutes, depending on your internet speed, CPU speed, and installation size.

I. Downloading the NetBeans

First, you will need to download the latest version of NetBeans from the website: <https://netbeans.org/downloads/>. On this page, you will be prompted to select the bundle of your choice. It is recommended that you download the full bundle under “All”, as this will allow you to program in other languages, such as Java, PHP, and HTML5. Alternatively, you can just install the minimal C++ bundle, which only requires 62 megabytes of hard drive space, as opposed to 210 megabytes for the full bundle download.

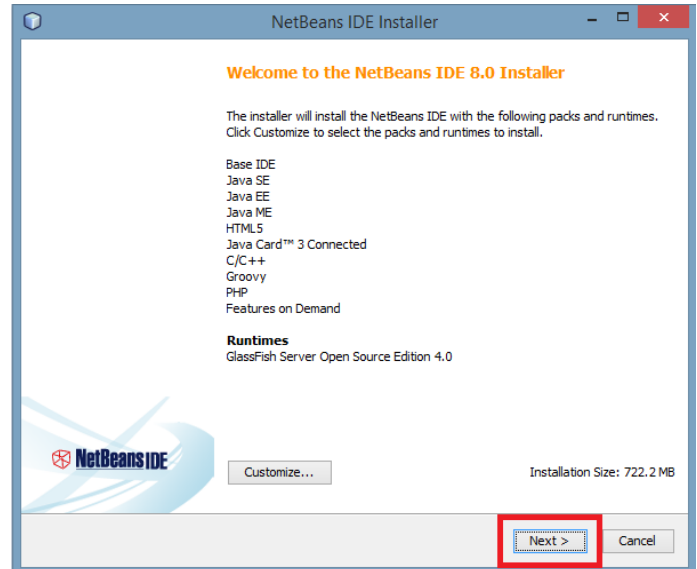
Supported technologies *	Java SE	Java EE	C/C++	HTML5 & PHP	All
NetBeans Platform SDK	•	•			•
Java SE	•	•			•
Java FX	•	•			•
Java EE		•			•
Java ME					•
HTML5		•		•	•
Java Card™ 3 Connected					•
C/C++			•		•
Groovy					•
PHP				•	•
Bundled servers					
GlassFish Server Open Source Edition 4.0		•			•
Apache Tomcat 8.0.3		•			•
	Download	Download	Download	Download	Download
	Free, 90 MB	Free, 191 MB	Free, 62 MB	Free, 63 MB	Free, 210 MB

Note: NetBeans is run using the Java SE Development Kit (JDK), so you will be prompted to either install or update Java on your computer, if you do not have Java 7 with the latest update installed already.

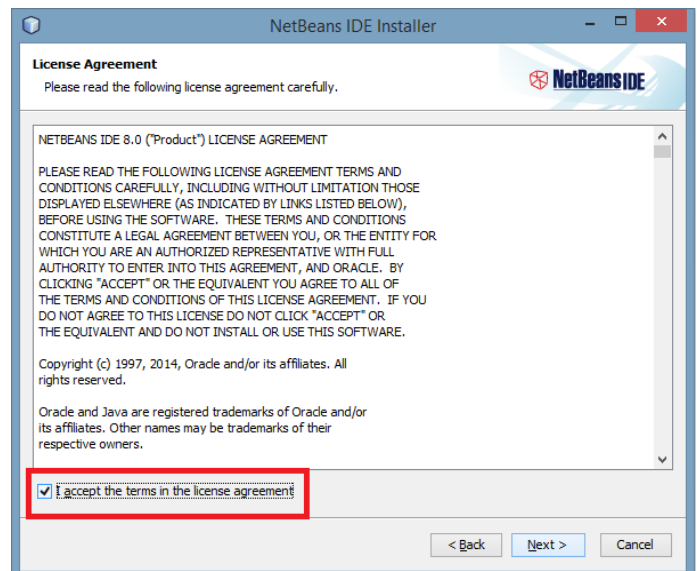
Click the “Download” button under the bundle you wish to install. Make sure that you have JavaScript turned in your browser. This will download the NetBeans installer. Open the file, and click the “Run” button to begin installation.

II. Installing NetBeans

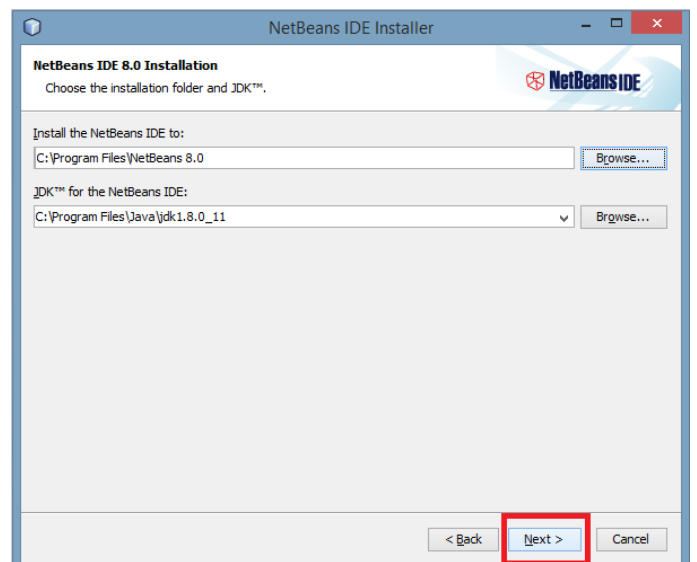
1. Click “Next” on the “Welcome” page of the installation box.
 - If you chose to install the full bundle, you will prompted to select which software packages to install. (Not pictured.)
 - **Be sure that C++ is selected.**



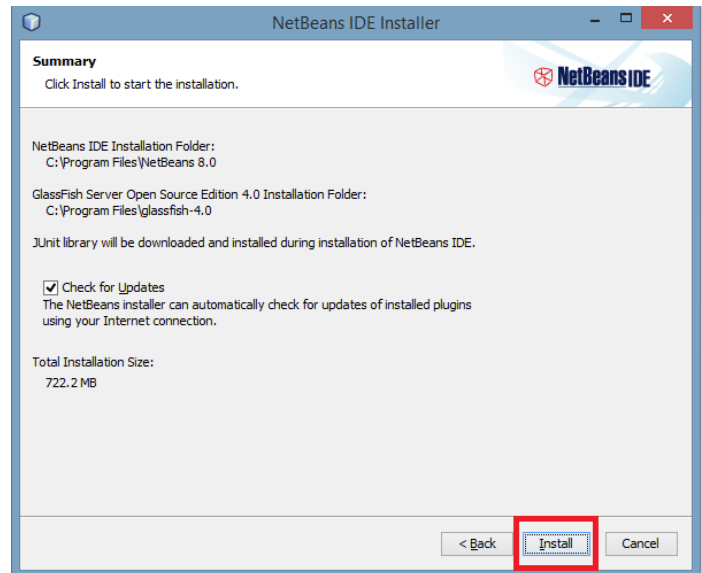
2. Read the software license agreement for NetBeans IDE.
3. Click the “Accept” checkbox.
4. Click the “Next” button.
5. Read the software license agreement for JUnit, if you are installing the full package for NetBeans (Not pictured.)
6. Click the “Accept” checkbox.
7. Click the “Next” button.



8. Accept the default installation folder for NetBeans and JDK, and click “Next”.
 - The destination folder **must be empty**.
 - You must have **read/write permissions** for the folder.
9. **Note: You will be prompted to install the latest version of Java if you do not have it or if you have an installation older than JDK 7 Update 10.**
 - To update Java, cancel your NetBeans installation and go to the Java SE Downloads page at <http://www.oracle.com/technetwork/java/javase/downloads/index.html>. Download and install the latest version of Java, then install NetBeans.

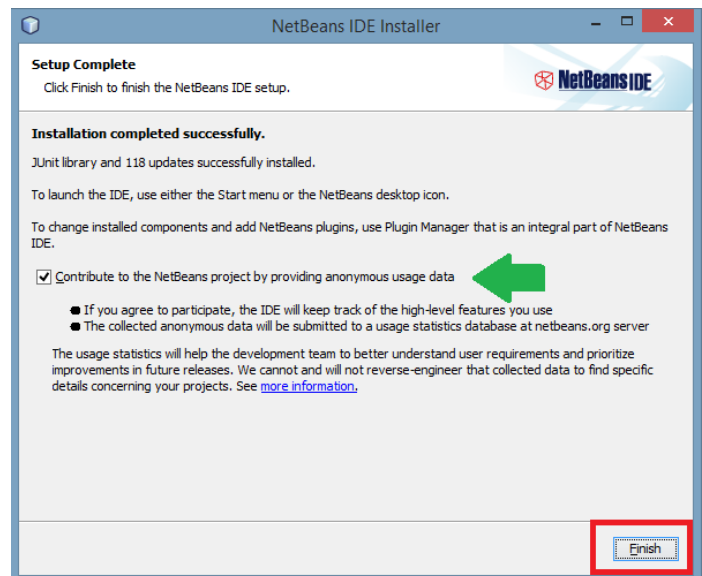


10. Review the installation summary and verify that you have adequate disk space.
11. Select whether you want NetBeans to automatically check for updates when you open it. This requires an internet connection and is recommended. However, NetBeans will still run without having to update itself.
12. Click the “Install” button to continue.



13. After setup is complete, you will be prompted to provide anonymous usage statistics (**optional**).
 - Click the “more information” link to read about anonymous usage statistics.
14. Select your preference and click the “Finish” button.

Warning: NetBeans is now fully installed and ready for use, but you will *not* be able to create C++ files without a compiler (see next section).



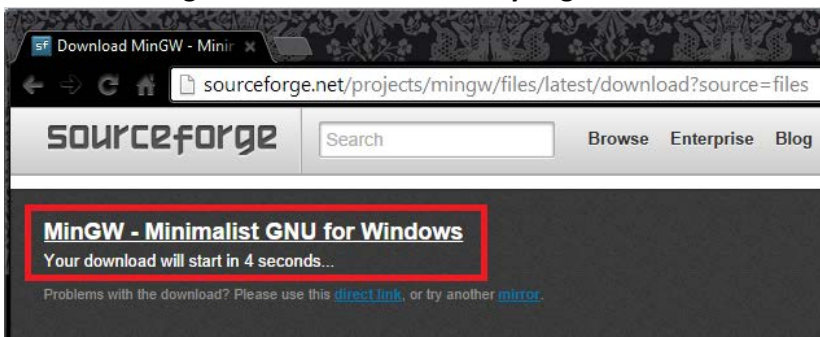
III. Downloading MinGW

Now that you have NetBeans installed, you will need to download and install the MinGW compiler.

Note: MinGW works best on Windows and *does not* provide a POSIX runtime environment. If you would like to install the POSIX application deployment, it is recommended you use the Cygwin compiler instead.

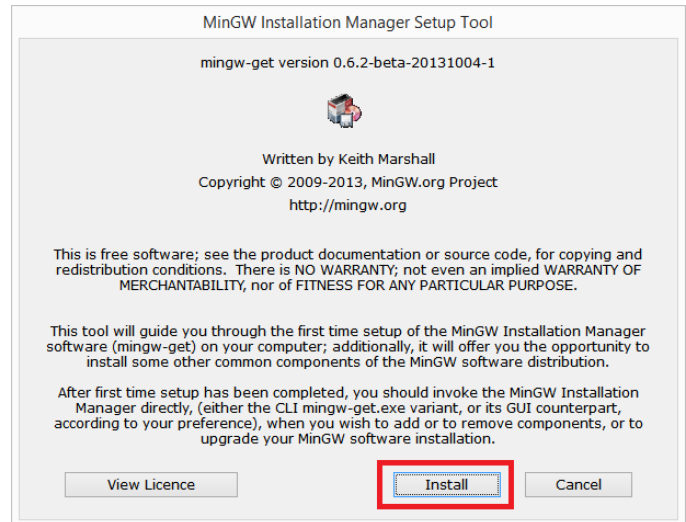
The recommended host for the MinGW installation package version 0.6.2 beta is located on SourceForge at:
<http://sourceforge.net/projects/mingw/files/latest/download?source=files>.

Note: Following this link will automatically begin the download for MinGW.

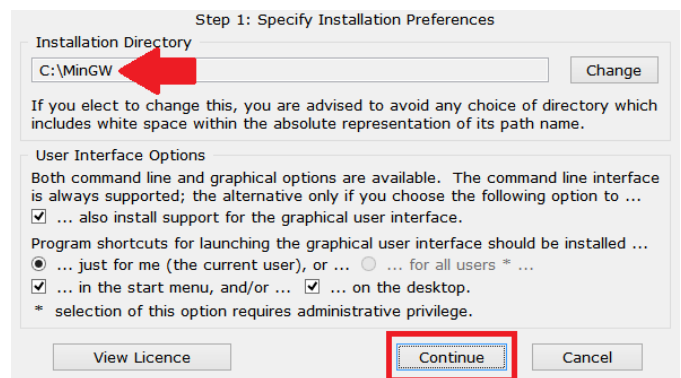


IV. Installing MinGW

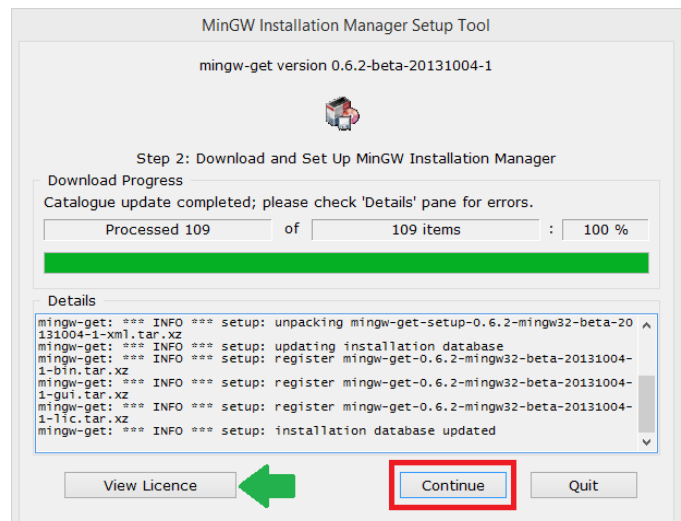
1. Once MinGW has downloaded, click “Run” to begin.
2. The MinGW Installation Manager Setup Tool will open.
 - Click the “View License” button if you wish to read the software licensing agreement.
3. Click the “Install” button to continue.



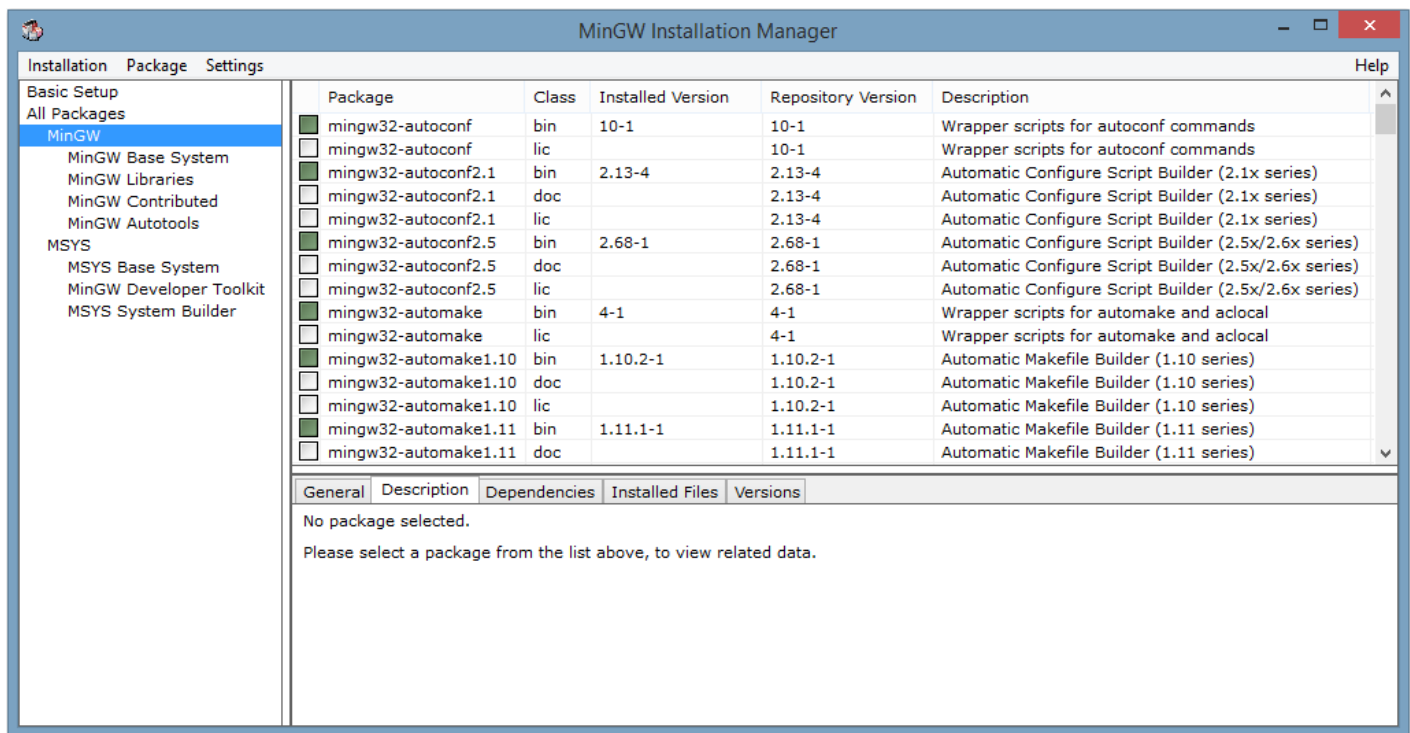
4. Leave the installation directory as “C:/MinGW”.
5. Select whether you would rather have graphic user interface or a command line interface.
 - For the sake of this tutorial, leave the graphic user interface option checked.
6. Select whether you would like program shortcuts on your Start page or on your Desktop.
7. Click the “Continue” button.



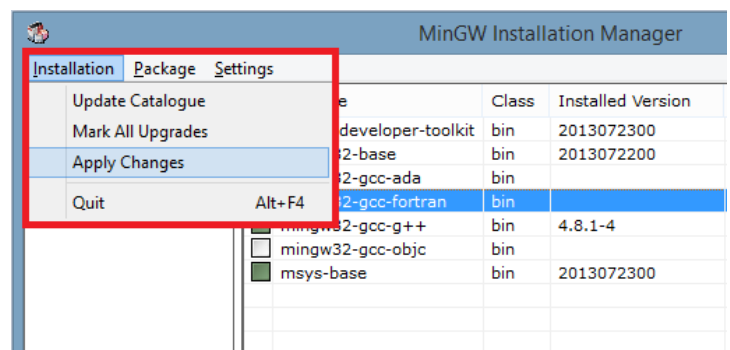
8. This will take you to the MinGW Installation Setup Tool and will install the compiler catalog.
9. Once the catalog is installed, click the “Continue” button.
 - You have the option to click the “View License” button here as well.



10. Once finished, the MinGW Installation Manager will open. You likely will not need to make any changes here. However, in the list on the right, make sure you have at least the following selected:
 - mingw-developer-toolkit (Class bin);
 - mingw32-base (Class bin);
 - mingw32-gcc-g++ (Class bin);
 - mingw32-gcc-g++ (Class: dev);
 - msys-base (Class: bin).



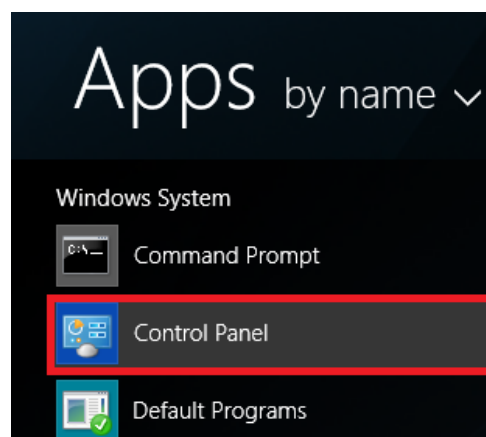
11. Click the menu item "Installation" in the upper left corner, and select "Apply Changes".
12. This will open the "Schedule of Pending Actions" box.
13. Click the "Apply" button to proceed.
14. After installation, click the "Close" button on the dialog box.
15. You can close the MinGW Installation Manager now if you wish.



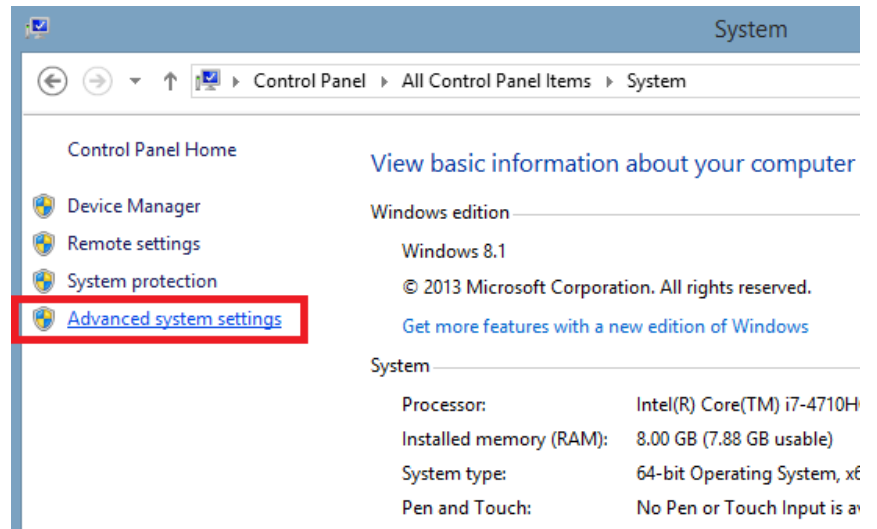
V. Including the MinGW Paths

Now that you have both NetBeans and MinGW installed, you will need to allow NetBeans access to MinGW's library.

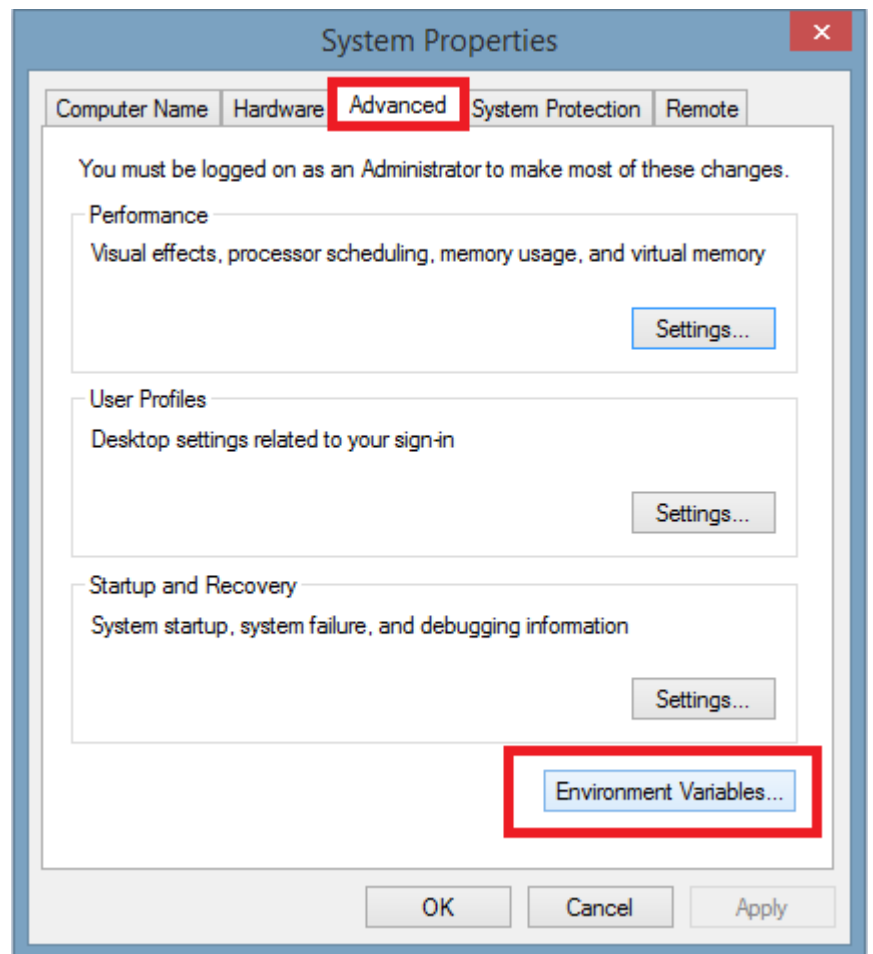
1. From the Start menu, click the down arrow to "View Apps".
2. Click on "by name" to sort your apps.
3. Click on "Control Panel" under the "Windows System" heading, at the end of the list.



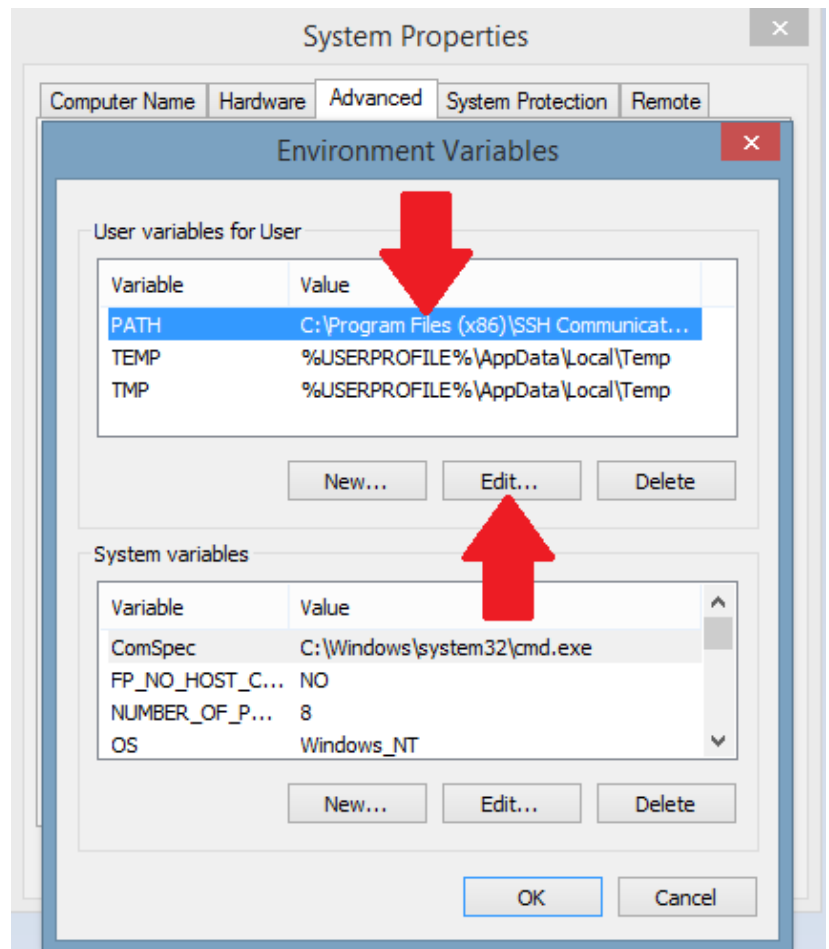
4. In the Control Panel, click on "System".
5. In the left panel, click on "Advanced System Settings".
 - Again, be sure you are logged in as the **administrator** of the computer.



6. Under the "Advanced" tab, click on the "Environment Variables" button.



7. In the box "User variables", select the "Path" option.
8. Click the "Edit..." button directly below.
9. This will open the "Edit User Variable" dialog box.

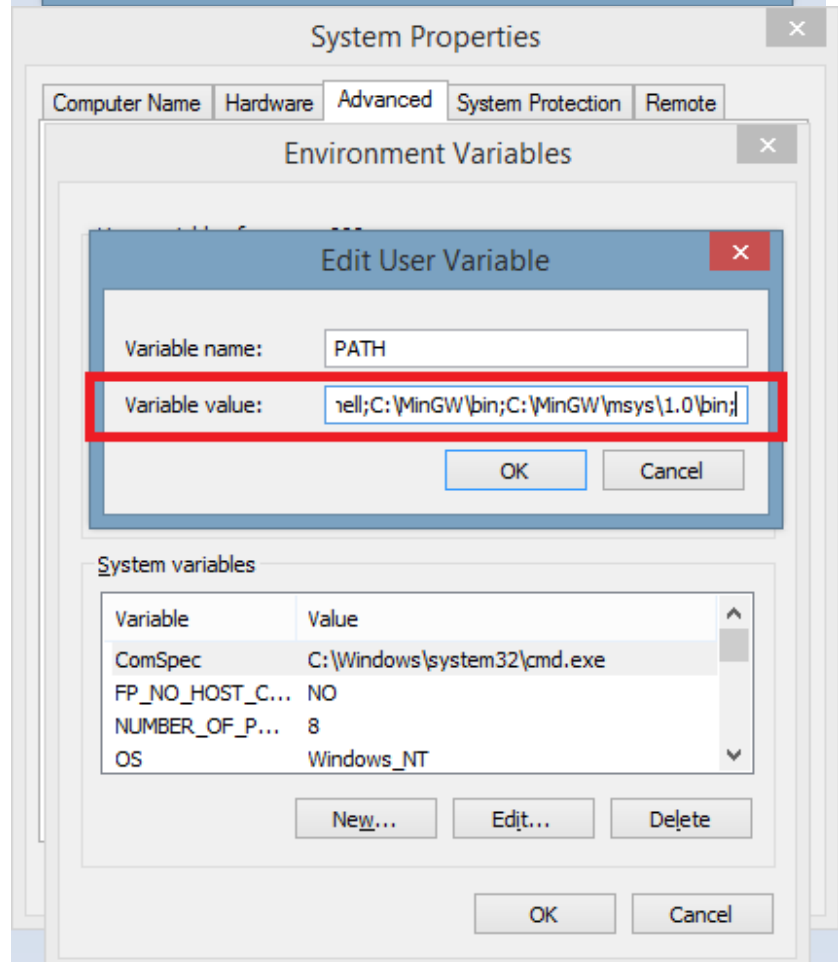


Warning: Do not remove anything here, as this can seriously damage your computer settings.

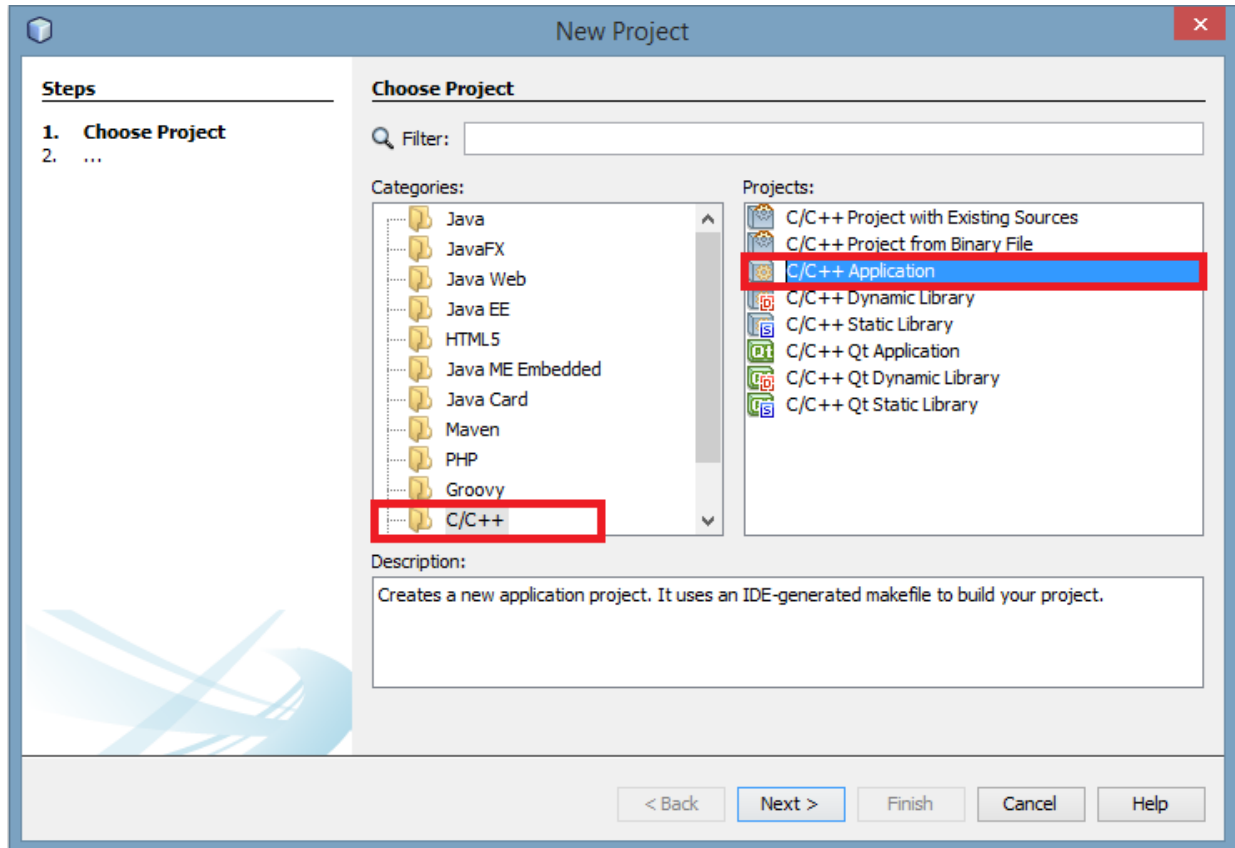
10. Under the line "Variable Value", scroll to the end of the line, and add the following **exactly**:

`;C:\MinGW\bin;C:\MinGW\msys\1.0\bin;`

11. Click the "OK" button on the dialog boxes to save your changes.
12. You must now either log off or restart Windows to apply your changes.



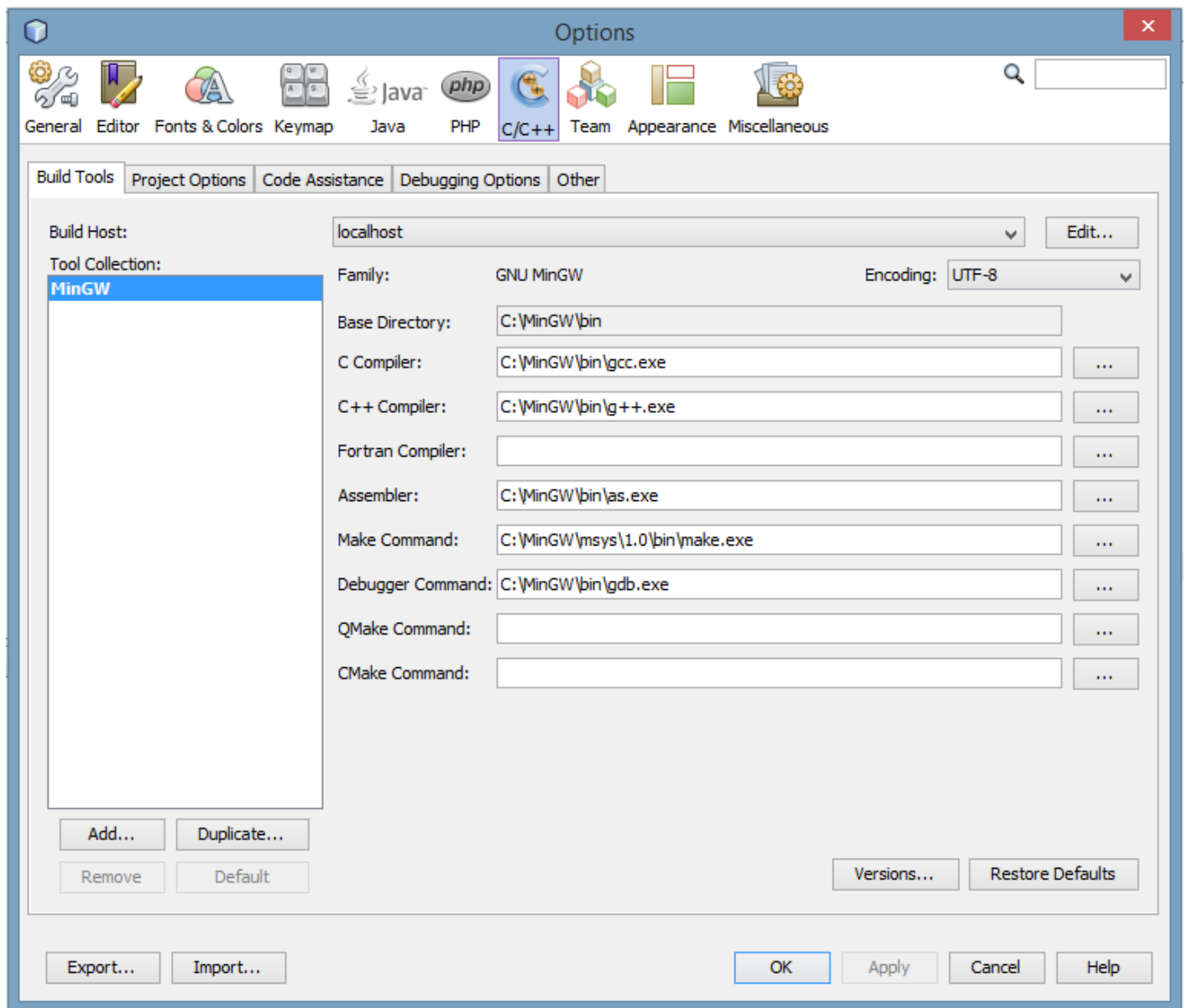
Open NetBeans and create a new project. You're all set!



VI. Troubleshooting

If NetBeans does not have the option to open or create a C++ application project, try the following:

- Shut down the computer completely and restart it.
- After installing MinGW, uninstall NetBeans, and reinstall it.
- Make sure you downloaded a NetBeans installation that supports C++.
 1. Click on the "Tools" menu at the top and select "Options". (See picture below).
 2. If you do not see an icon for "C/C++", you did not install the C++ component for NetBeans.
 3. Go back to <http://www.netbeans.org/downloads> and download the correct build. (See **Section I.**)
 4. Make sure that C/C++ is selected during the install. (See **Section II.**)
- Make sure NetBeans has MinGW set as its default Build tool:
 1. Click on the "Tools" menu at the top and select "Options".
 2. Click on the "Click on the "C/C++" icon.
 3. Under the "Build Tools" tab, on the "Tool Collection", you should only see MinGW installed.
 4. Other options should be set to MinGW as well:
 - Family: GNU MinGW
 - Encoding: UTF-8
 - Base Directory: C:\MinGW\bin
 - C Compiler: C:\MinGW\bin\gcc.exe
 - C++ Compiler: C:\MinGW\bin\g++.exe
 - Assembler: C:\MinGW\bin\as.exe
 - Make Command: C:\MinGW\msys\1.0\bin\make.exe
 - Debugger Command: C:\MinGW\bin\gdb.exe



- Double check that you input the MinGW directories into the **PATH** for “**User variables**”, not into the Path for “System variables”. (See **Section V**, step 7.)
- Make sure that the MinGW directories in the **User variables path** are the same as the directories in which you installed MinGW. For example, if you installed MinGW to a desktop folder, you would change the path to read:
“;C:\Users\[Your Name]\Desktop\MinGW\bin;C:\Users\[Your Name]\Desktop\MinGW\msys\1.0\bin;”
- **Warning: It is recommended you install MinGW on C:\MinGW. Installing it under user folders is NOT recommended.**

Good luck!