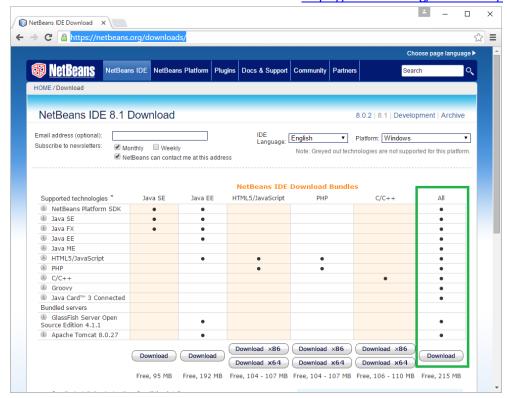
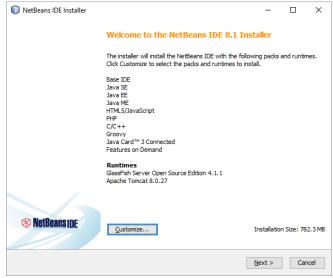
### 1. Install Netbeans on Windows

Download the lastest version of Netbeans from the website https://netbeans.org/downloads/

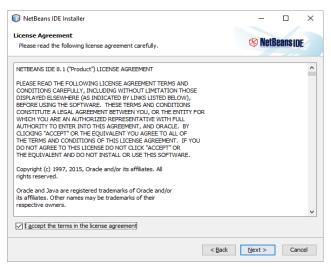


The full bundle under "All" allows to program in different languages (such as Java, HTML5, PHP, C++), download full bundle ("All") is recommended.

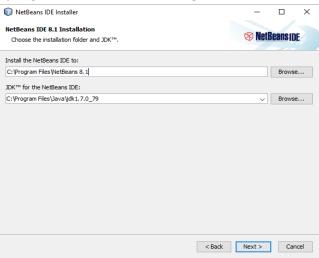
• Click the "Download" button under the bundle to download the Netbeans installer file. Then open the file (netbeans-8.1-windows.exe) and click on "Run" to begin the installation.



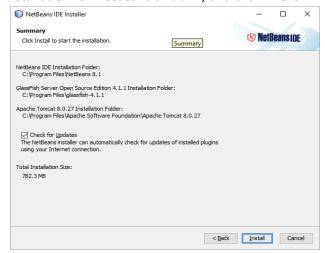
• On the Welcome page, click "Next", the software license agreement for Netbeans IDE will be displayed



• Click the checkbox for accepting the terms in the license agreement and click "Next" button



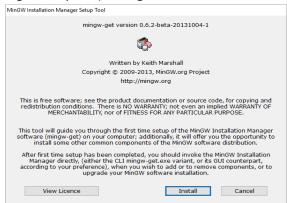
Accept the default folder installation for Netbeans and JDK, and click "Next"



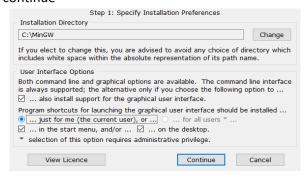
- Review the installation summary and click "Install" button to continue
- When setup complete, click on "Finish" button to complete Netbeans installation.

## 2. Install MinGW for C++ Compiler in Netbeans

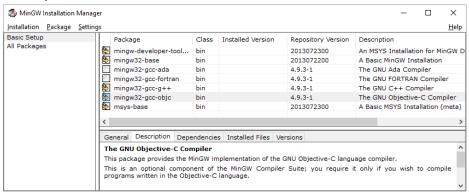
- Download MinGW at <a href="http://www.mingw.org/category/wiki/download">http://www.mingw.org/category/wiki/download</a> or
   <a href="https://sourceforge.net/projects/mingw/files/latest/download?source=files">https://sourceforge.net/projects/mingw/files/latest/download?source=files</a>
- Click on download file (mingw-get-setup.exe) to begin the installation



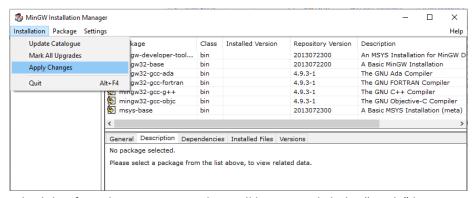
Click on "Install" button to continue



- Check the installation directory (leave the installation directory as "C:\MinGW" and click "Continue" button
- When the catalog update completed, click "Continue" button, MinGW installation Manager will open.
   At least the following package should be selected for the basic setup
  - Mingw-developer-toolkit
  - Mingw32-base
  - Mingw32-gcc-g++
  - Msys-base

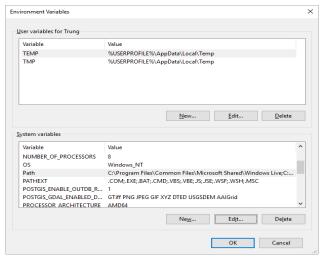


• Select "Appy Changes" in the "Installation" menu

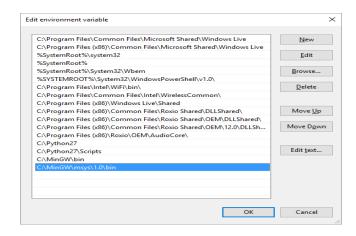


The Schedule of Pending Actions window will be open, click the "Apply" button to process the package download. Once process is complete, MinGW Installation Manager can be closed.

- Including the MinGW paths into PC Environment Variables:
  - Open Environment Variables



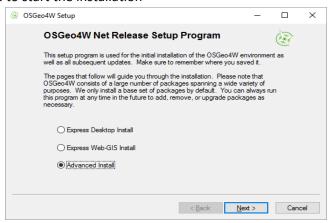
O Add the MinGW paths: C:\MinGW\bin;C:\MinGW\msys\1.0\bin Into "path" variables



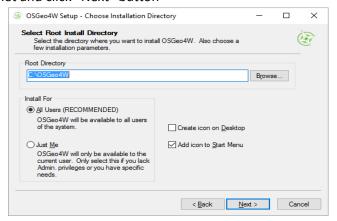
• Log off or restart Windows to apply the changes of Environment Variables.

### 3. Install OSGeo4W

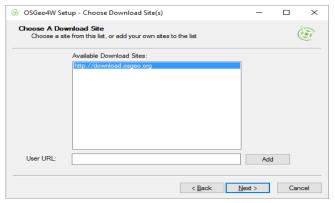
- Download OSGeo4W from the website <a href="https://trac.osgeo.org/osgeo4w/">https://trac.osgeo.org/osgeo4w/</a>. OSgeo4W 32bit is recommended.
- Click in the download file to start the installation



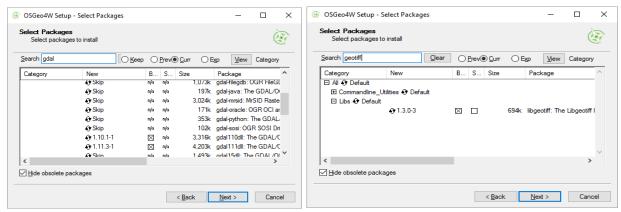
- Select Advanced Install radio and click "Next" button
- Select Install From Internet and click "Next" button



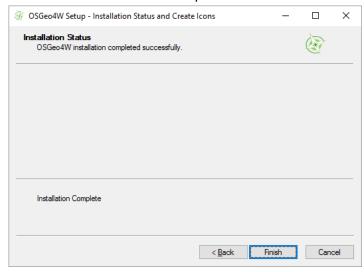
- Select Root Install Directory, leave the installation directory C:\OSGeo4W and click "Next" button to continue.
- Select Local Package Directory will be showed up, and the click "Next" button to continue
- Click "Next" button for Internet Connection



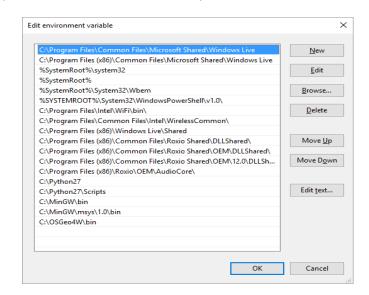
Choose download site and click "Next" button



- Select desired packages to use for the development. Search the package in "Search" box, make sure that the latest version of gdal, geotiff, libtiff and geos are selected.
- Select agree for the license and click "Next" button to process

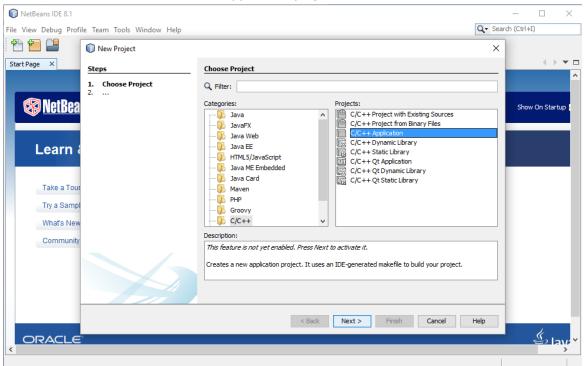


- Click "Finish" button
- Add the OSGeo4W paths: C:\OSGeo4W\bin into "path" Environment Variables

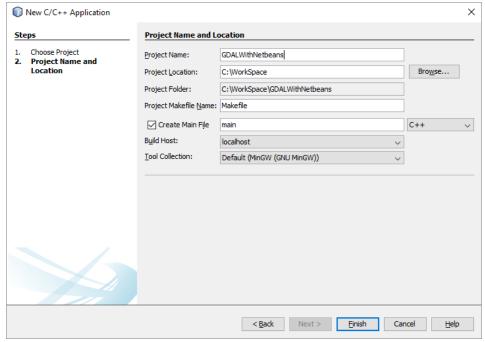


# 4. Create C++ Project in Netbeans and include GDAL

- Create C++ Project in Netbeans
  - Launch Netbeans IDE and create C++ Application projet

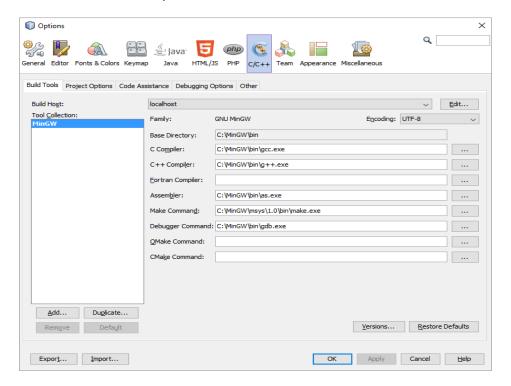


Specify project name and location and click "Finish" button



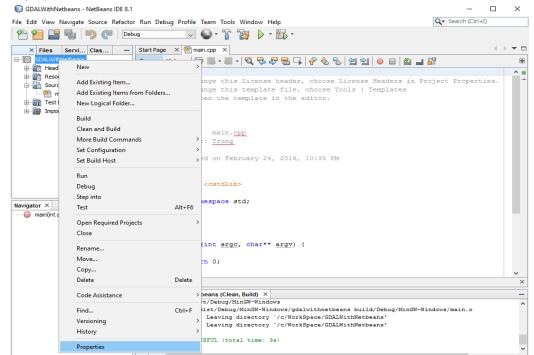
Make sure NetBeans has MinGW set as its default Build tool

#### Select NetBeans menu Tools > Options and then select C/C++ Tab and check if MinGW is there

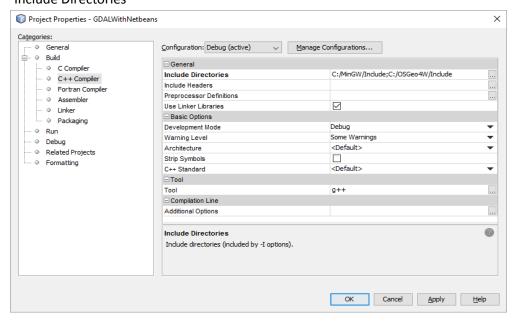


If not, click on "Add" button and select MinGW for each textbox on the right side.

- Set MinGW for C++ compiler with including GDAL
  - Right click on the project name and select Properties, Project Properties windows will be displayed



O Click on "C++ Compiler" tab and add C:/MinGW/Include and C:/OSGeo4W/Include into "Include Directories"



- Select Linker tab from Project Properties Windows and then
  - add C:\MinGW\bin;C:\MinGW\lib;C:\OSGeo4W\bin;C:\OSGeo4W\lib in
    Additional Library Directories
  - add C:\OSgeo4W\lib\gdal\_i.lib, C:\OSgeo4W\lib\geos\_c.lib,
    C:\OSgeo4W\lib\hdf5.lib, C:\OSgeo4W\lib\proj\_i.lib,
    C:\OSgeo4W\lib\spatialite\_i.lib and C:\OSGeo4W\bin\gdal200.dll into
    Libraries text box
  - add -static-libgcc -static-libstdc++ into Additional Options

