

Nano node build on Windows 10

Install windows 10

Run windows update and restart windows

Visual Studio 2019

Install Visual Studio Community 2019 (version 16.11) <https://visualstudio.microsoft.com/vs/older-downloads/>

Make sure to tick "Desktop development with C++" and leave everything else at default

The screenshot shows the Visual Studio 2019 installation interface. The 'Workloads' tab is active, showing two categories: 'Web & Cloud (4)' and 'Desktop & Mobile (5)'. In the 'Desktop & Mobile' section, 'Desktop development with C++' is selected with a blue checkmark. The 'Installation details' pane on the right shows the following options:

- Visual Studio core editor
- Desktop development with C++
 - Included
 - C++ core desktop features
 - Optional
 - MSVC v142 - VS 2019 C++ x64/x86 build tools (checked)
 - Windows 10 SDK (10.0.19041.0) (checked)
 - Just-In-Time debugger (checked)
 - C++ profiling tools (checked)
 - C++ CMake tools for Windows (checked)
 - C++ ATL for latest v142 build tools (x86 & x64) (checked)
 - Test Adapter for Boost.Test (checked)
 - Test Adapter for Google Test (checked)
 - Live Share (checked)
 - IntelliCode (checked)
 - C++ AddressSanitizer (checked)
 - MSVC v142 - VS 2019 C++ ARM64 build tools (unchecked)
 - C++ MFC for latest v142 build tools (x86 & x64) (unchecked)
 - C++/CLI support for v142 build tools (Late Release) (unchecked)
 - C++ Modules for v142 build tools (x64/x86) (unchecked)

Boost

Install Boost 1.74.0 binaries for msvc 14.2. Use default settings during install

https://sourceforge.net/projects/boost/files/boost-binaries/1.74.0/boost_1_74_0-msvc-14.2-64.exe/download

CMAKE

Install Cmake windows installer, Latest Release (currently 3.22.3)

<https://cmake.org/download/>

Check the option 'Add cmake to system path for all users'

GIT

Download a git tool of choice. I used Github desktop <https://desktop.github.com/>

Clone the Nano node develop branch from Github

from URL <https://github.com/nanocurrency/nano-node>

to C:/Users/Ricki/Documents/GitHub/nano-node

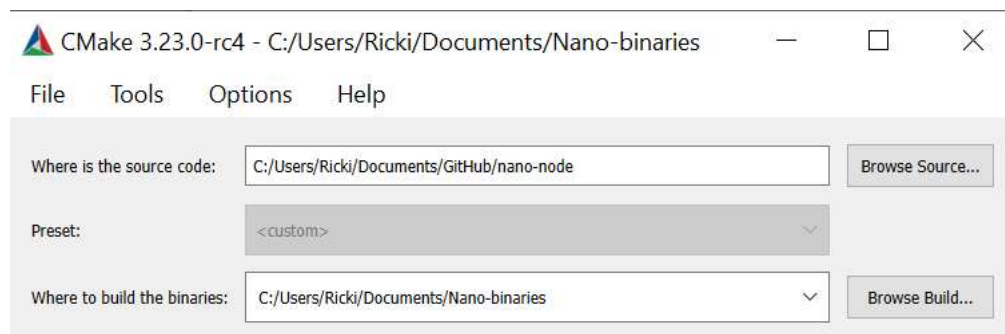
- Restart windows -

Setting up the solution

Run Cmake gui

Set source to C:/Users/Ricki/Documents/GitHub/nano-node

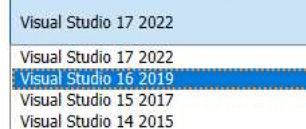
Create a folder for the destination files. I Used C:/Users/Ricki/Documents/NanoSolution



Click configure and select visual studio 2019



Specify the generator for this project



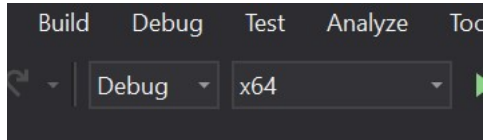
Set any options you want like the ACTIVE_NETWORK but leave NANO_GUI off because this requires qt to be installed

Click generate and close Cmake

Visual studio 2019

Open project solution file in C:\Users\Ricki\Documents\NanoSolution\nano-node-beta.sln

At the top of the screen select the build type (debug or release) and architecture



Now go to the build menu and select build

When build has finished you will find the compiled files at

C:\Users\Rickii\Documents\NanoBinaries\Debug

for debug build

or

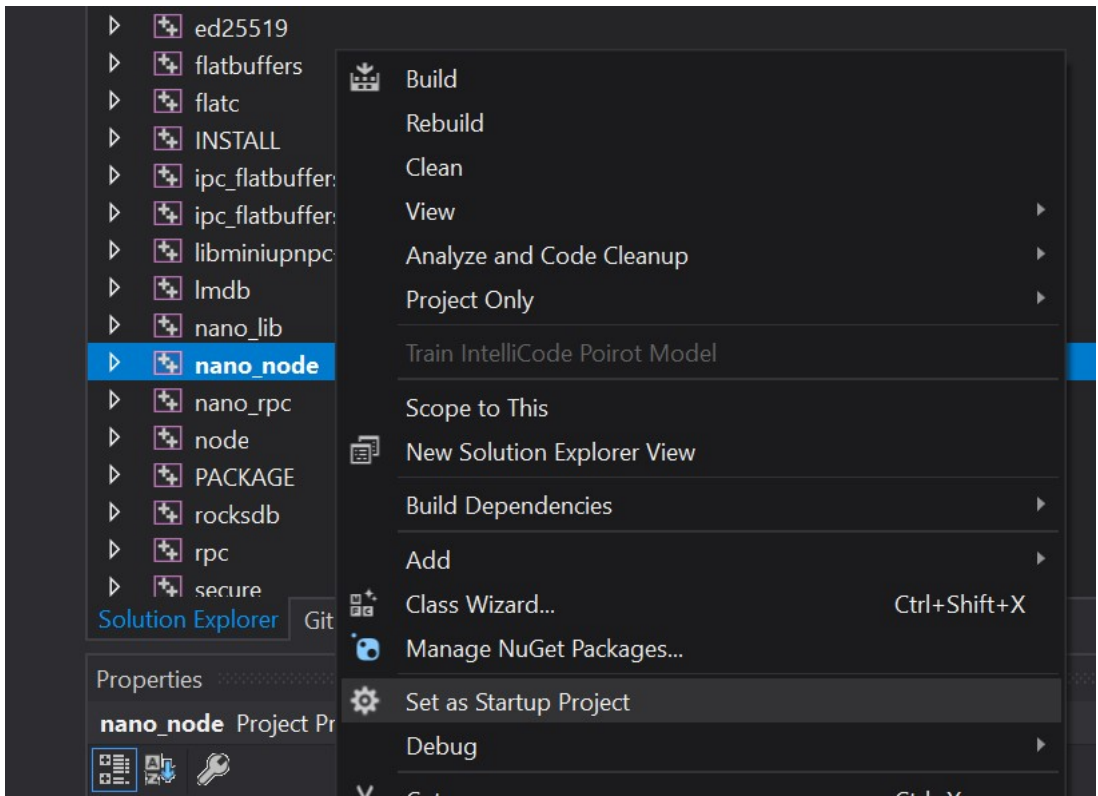
C:\Users\Rickii\Documents\NanoBinaries\Release

For Release build

Optional: Setup debugging

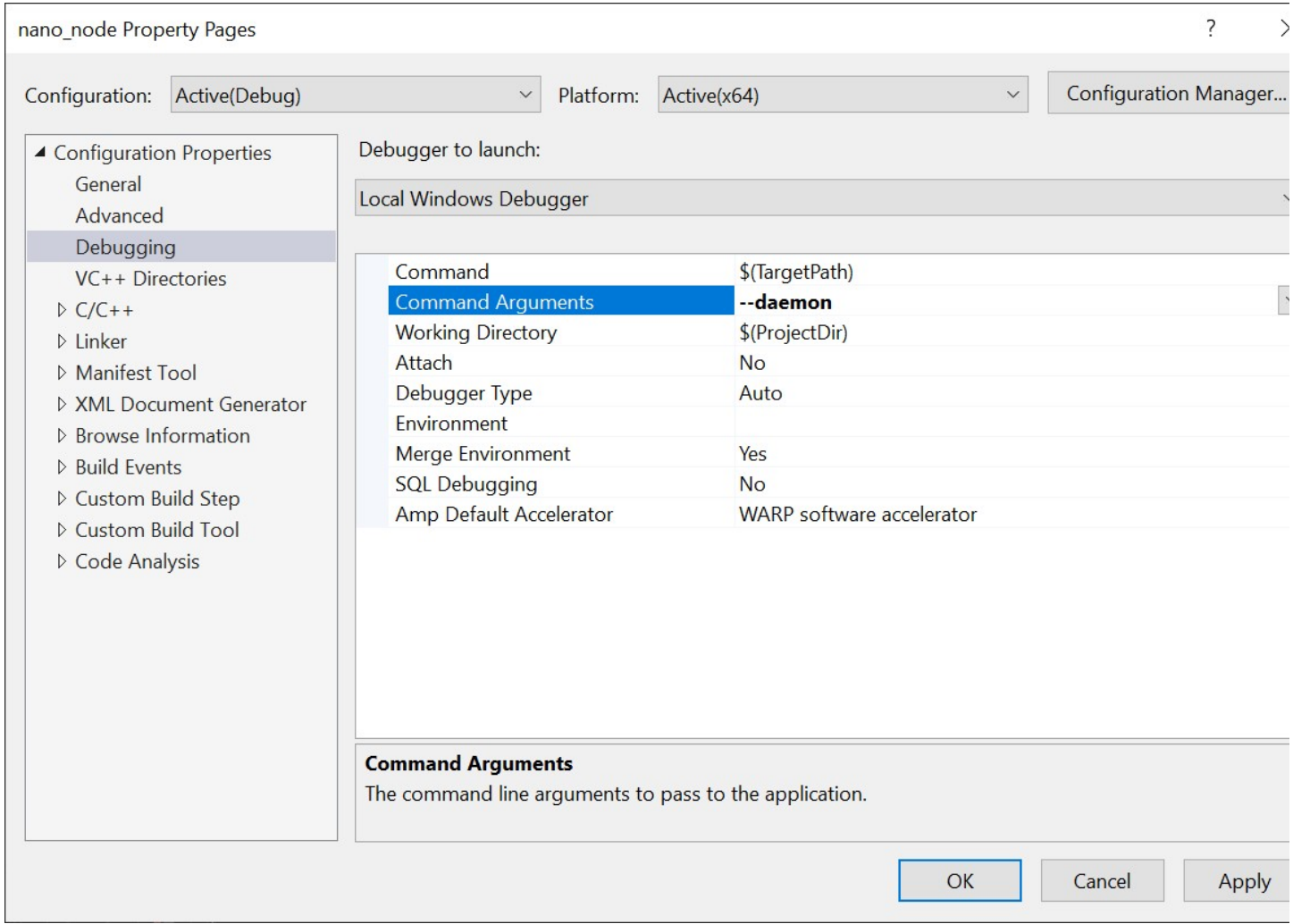
You can setup the node to stop at code breakpoints and then inspect values during runtime.

Find the nano_node project in the solution explorer on the right pane. Then right click it and select 'Set as startup project'



Now right click the nano_node project again and click properties

Go to configuration properties/debugging and set the 'Command Arguments' to "--daemon" an click OK



From visual studio just hit F5 to start debugging. When a breakpoint is hit, visual studio will halt the code and take focus