

New issue

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Can't build on Windows - No CUDA toolset found error #164



dokluch opened this issue on Oct 7, 2022 · 11 comments

dokluch commented on Oct 7, 2022



I can't install tiny-cuda-nn neither with **pip**, nor building it with Cmake.
However, Cmake produces at least a **readable** error:

```
-- Selecting Windows SDK version 10.0.19041.0 to target Windows 10.0.19044.
-- The CXX compiler identification is MSVC 19.29.30139.0
CMake Error at C:/Program Files/CMake/share/cmake-3.24/Modules/CMakeDetermineCompilerId.cmake:491 (n
  No CUDA toolset found.
Call Stack (most recent call first):
  C:/Program Files/CMake/share/cmake-3.24/Modules/CMakeDetermineCompilerId.cmake:6 (CMAKE_DETERMINE_
  C:/Program Files/CMake/share/cmake-3.24/Modules/CMakeDetermineCompilerId.cmake:48 (__determine_con
  C:/Program Files/CMake/share/cmake-3.24/Modules/CMakeDetermineCUDACompiler.cmake:307 (CMAKE_DETERN
  CMakeLists.txt:25 (project)

-- Configuring incomplete, errors occurred!
See also "C:/Code/tiny-cuda-nn/build/CMakeFiles/CMakeOutput.log".

C:\Code\tiny-cuda-nn>cmake . -B build
-- Selecting Windows SDK version 10.0.19041.0 to target Windows 10.0.19044.
CMake Error at C:/Program Files/CMake/share/cmake-3.24/Modules/CMakeDetermineCompilerId.cmake:491 (n
  No CUDA toolset found.
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  CMakeLists.txt:25 (project)

-- Configuring incomplete, errors occurred!
See also "C:/Code/tiny-cuda-nn/build/CMakeFiles/CMakeOutput.log".
```

I have CUDA 11.8 **installed**, CUDA_PATH is set properly.
Microsoft Visual Studio 2019, Community Edition
Nvidia A6000



4

Dy111111 commented on Oct 17, 2022



you just need to copy all the four files from C:\Program Files\NVIDIA GPU **Computing** Toolkit\CUDA\v11.7\extras\visual_studio_integration\MSBuildExtensions, and paste them to C:\Program Files (x86)\Microsoft Visual Studio\2019\Enterprise\MSBuild\Microsoft\VC\v160\BuildCustomizations. These paths should be changed to your own.

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  **cwjacklin** mentioned this issue on Apr 17, 2023

any windows install document lifeiteng/vall-e#57

 Closed

tares003 commented on May 1, 2023 • edited ▾



you just need to copy all the four files from C:\Program Files\NVIDIA GPU **Computing** Toolkit\CUDA\v11.7\extras\visual_studio_integration\MSBuildExtensions, and paste them to C:\Program Files (x86)\Microsoft Visual Studio\2019\Enterprise\MSBuild\Microsoft\VC\v160\BuildCustomizations. These paths should be changed to your own.

Man you saved a week trying to fix this issue!!! Finally solved it !!

what the reason behind this ?

 3

wcneill commented on May 27, 2023 • edited ▾



you just need to copy all the four files from C:\Program Files\NVIDIA GPU **Computing** Toolkit\CUDA\v11.7\extras\visual_studio_integration\MSBuildExtensions, and paste them to C:\Program Files (x86)\Microsoft Visual Studio\2019\Enterprise\MSBuild\Microsoft\VC\v160\BuildCustomizations. These paths should be changed to your own.

Edit: If you do not have the VS IDE **installed** but are only using the build tools, say in conjunction with VS Code, the solution is about the same. The same directory exists inside of Visual Studio Build Tools:

```
C:\Program Files (x86)\Microsoft Visual Studio\2019\BuildTools\MSBuild\Microsoft\VC\v160\BuildCustomizations
```

I placed those 4 files there and it solved my problem. Thank you.

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HenkPoley commented on Jul 31, 2023

Very similar paths for MS VS 2022:

```

C:\Program Files (x86)\Microsoft Visual Studio\2022\BuildTools\MSBuild\Microsoft\VC\v170\BuildCustomizations
C:\Program Files (x86)\Microsoft Visual Studio\2022\BuildTools\MSBuild\Microsoft\VC\v160\BuildCustomizations

```

4

shasha1832 commented on Sep 5, 2023 • edited

Thanks for the info, I have MS VS 2017 build tools but the path C:\Program Files (x86)\Microsoft Visual Studio\2022\BuildTools\MSBuild\Microsoft\VC does not exists
 Could some one help here where i can copy the 4 files to which location ?

HenkPoley commented on Sep 5, 2023 • edited

The paths are described here: <https://docs.nvidia.com/cuda/cuda-installation-guide-microsoft-windows/index.html#sample-projects>

Have you tried looking under:

```

C:\Program Files (x86)\Microsoft Visual Studio\2017\Community\Common7\IDE\VC\VCTargets\BuildCustomizations

```

The part between 2017 and Common7 might be different based on how much money you get to spend on MS VC 2017.

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shasha1832 commented on Sep 5, 2023

Thanks [@HenkPoley](#) for the document link. There is a tweak here, we don't have IDE we have only build tools.
 Also i am able to find all 4 files in the location C:\Program Files (x86)\MSBuild\Microsoft.Cpp\v4.0\BuildCustomizations but looks like its **deprecated**. Question is does the IDE is mandatory for cmake to find cuda. Source code used of CMakeLists.txt
 if (WIN32)
 message("Windows machine found CMAKE_CUDA_COMPILER will be set")
 set (CMAKE_CUDA_COMPILER "C:/Program Files/NVIDIA GPU **Computing**


```
Toolkit/CUDA/v11.8/bin/nvcc.exe")
endif()
include(CheckLanguage)
check_language(CUDA)

if (CMAKE_CUDA_COMPILER)
message("Cuda verified ****")
enable_language(CUDA)
set(CUDA_MODE ON)
message("Enabled Cuda")
else()
message(STATUS "No CUDA compiler found; disabling CUDA model")
endif()
```

The cmake configuration fails with same error - No CUDA toolset found in enable_language(CUDA). I have already invested one day, but nothing helped. if you can help here will be really helpful.

Machine details -
OS Windows 19 Server
Cuda v11.8
Visual Studio build tools (IDE not allowed to be **installed**)

shasha1832 commented on Sep 5, 2023

Omg your hints saved my day if we copy that 4 files here C:\Program Files (x86)\Microsoft Visual Studio\2017\BuildTools\Common7\IDE\VC\VCTargets\BuildCustomizations it works. **zippy**



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shawn-peng commented on Sep 15, 2023

Here is my location, if you customized the install location and are not happy with the **orphan** dir.
"G:\VS_BuildTools\MSBuild\Microsoft\VC\v170\BuildCustomizations"
This is for VSCode2022. Just search "BuildCustomizations" inside the build tools installation dir if the path is different for you.

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  rdavydov mentioned this issue on Nov 1, 2023

Failed to build llama-cpp-python imartinez/privateGPT#1116

 Closed

 awijshoff mentioned this issue on Dec 15, 2023

No CUDA toolset found Error even its Found CUDAToolkit withcatai/node-**llama**-cpp#122

 Closed

 3 tasks

jekeam commented 3 weeks ago • edited

you just need to copy all the four files from C:\Program Files\NVIDIA GPU **Computing** Toolkit\CUDA\v11.7\extras\visual_studio_integration\MSBuildExtensions, and paste them to C:\Program Files (x86)\Microsoft Visual Studio\2019\Enterprise\MSBuild\Microsoft\VC\v160\BuildCustomizations. These paths should be changed to your own.

Edit: If you do not have the VS IDE **installed** but are only using the build tools, say in conjunction with VS Code, the solution is about the same. The same directory exists inside of Visual Studio Build Tools:

C:\Program Files (x86)\Microsoft Visual Studio\2019\BuildTools\MSBuild\Microsoft\VC\v160\BuildCustomizations

I placed those 4 files there and it solved my problem. Thank you.

My error: No CUDA toolset found

Solution:

I copied the four files from C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v12.1\extras\visual_studio_integration\MSBuildExtensions And pasted into C:\Program Files\Microsoft Visual Studio\2022\Community\MSBuild\Microsoft\VC\v170\BuildCustomizations

 NicolasKritter mentioned this issue 2 weeks ago

GPU support dont works imartinez/privateGPT#1503

 Open

HankTheCrank commented 4 days ago

In case this helps someone else: I was running from an elevated PowerShell window which does not seem to use my account's environment variables. Once I ran in a normal PowerShell window, it all worked.

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

No branches or pull requests

9 participants

