GET STARTED

Select preferences and run the command to install PyTorch locally, or get started quickly with one of the supported cloud platforms.

Shortcuts
Prerequisites
Supported Windows
Distributions
Python
Package Manager
Installation
Anaconda
pip
Verification
Building from source
Prerequisites

START LOCALLY

Select your preferences and run the install command. Stable represents the most currently tested and supported version of PyTorch. This should be suitable for many users. Preview is available if you want the latest, not fully tested and supported, 1.12 builds that are generated nightly. Please ensure that you have **met the prerequisites below (e.g., numpy)**, depending on your package manager. Anaconda is our recommended package manager since it installs all dependencies. You can also install previous versions of PyTorch. Note that LibTorch is only available for C++.

PyTorch Build	Stable (1.12.1)	Preview (Nightly)	LTS (1.8.2)
Your OS	Linux	Mac	Windows
Package	Conda	Pip	LibTorch	Source
Language	Python	C++ / Java
Compute Platform	CUDA 10.2	CUDA 11.3	CUDA 11.6	ROCm 5.1.1	CPU
Run this Command:	CUDA=10.2 PyTorch builds are no longer available for Windows, please use CUDA=11.6		

Installing on Windows

PyTorch can be installed and used on various Windows distributions. Depending on your system and compute requirements, your experience with PyTorch on Windows may vary in terms of processing time. It is recommended, but not required, that your Windows system has an NVIDIA GPU in order to harness the full power of PyTorch's CUDA support.

PREREQUISITES

Supported Windows Distributions

PyTorch is supported on the following Windows distributions:

- Windows 7 and greater; Windows 10 or greater recommended.
- Windows Server 2008 r2 and greater

> *The install instructions here will generally apply to all supported Windows distributions. The specific examples shown will be run on a Windows 10 Enterprise machine*

Python

Currently, PyTorch on Windows only supports Python 3.7-3.9; Python 2.x is not supported.

As it is not installed by default on Windows, there are multiple ways to install Python:

- Chocolatey

> *If you use Anaconda to install PyTorch, it will install a sandboxed version of Python that will be used for running PyTorch applications.*

> *If you decide to use Chocolatey, and haven't installed Chocolatey yet, ensure that you are running your command prompt as an administrator.*

For a Chocolatey-based install, run the following command in an administrative command prompt:

```
choco install python
```

Package Manager

To install the PyTorch binaries, you will need to use at least one of two supported package managers: Anaconda and pip. Anaconda is the recommended package manager as it will provide you all of the PyTorch dependencies in one, sandboxed install, including Python and `pip`.

Anaconda

To install Anaconda, you will use the 64-bit graphical installer for PyTorch 3.x. Click on the installer link and select `Run`. Anaconda will download and the installer prompt will be presented to you. The default options are generally sane.

pip

If you installed Python by any of the recommended ways above, pip will have already been installed for you.

INSTALLATION

Anaconda

To install PyTorch with Anaconda, you will need to open an Anaconda prompt via `Start | Anaconda3 | Anaconda Prompt`.

No CUDA

To install PyTorch via Anaconda, and do not have a CUDA-capable system or do not require CUDA, in the above selector, choose OS: Windows, Package: Conda and CUDA: None. Then, run the command that is presented to you.

With CUDA

To install PyTorch via Anaconda, and you do have a CUDA-capable system, in the above selector, choose OS: Windows, Package: Conda and the CUDA version suited to your machine. Often, the latest CUDA version is better. Then, run the command that is presented to you.

pip

No CUDA

To install PyTorch via pip, and do not have a CUDA-capable system or do not require CUDA, in the above selector, choose OS: Windows, Package: Pip and CUDA: None. Then, run the command that is presented to you.

With CUDA

To install PyTorch via pip, and do have a CUDA-capable system, in the above selector, choose OS: Windows, Package: Pip and the CUDA version suited to your machine. Often, the latest CUDA version is better. Then, run the command that is presented to you.

VERIFICATION

To ensure that PyTorch was installed correctly, we can verify the installation by running sample PyTorch code. Here we will construct a randomly initialized tensor.

From the command line, type:

```
python
```

then enter the following code:

```
import torch
x = torch.rand(5, 3)
print(x)
```

The output should be something similar to:

```
tensor([[0.3380, 0.3845, 0.3217],
        [0.8337, 0.9050, 0.2650],
        [0.2979, 0.7141, 0.9069],
        [0.1449, 0.1132, 0.1375],
        [0.4675, 0.2941, 0.1426]])
```

Additionally, to check if your GPU driver and CUDA is enabled and accessible by PyTorch, run the following commands to return whether or not the CUDA driver is enabled:

```
import torch
torch.cuda.is_available()
```

BUILDING FROM SOURCE

For the majority of PyTorch users, installing from a pre-built binary via a package manager will provide the best experience. However, there are times when you may want to install the bleeding edge PyTorch code, whether for testing or actual development on the PyTorch core. To install the latest PyTorch code, you will need to build PyTorch from source.

Prerequisites

1. Install Anaconda
2. Install CUDA, if your machine has a CUDA-enabled GPU.
3. If you want to build on Windows, Visual Studio with MSVC toolset, and NVTX are also needed. The exact requirements of those dependencies could be found out here.
4. Follow the steps described here: https://github.com/pytorch/pytorch#from-source

You can verify the installation as described above.