NVIDIA GPU CLOUD

Getting Started Guide
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Chapter 1.
GETTING STARTED USING NVIDIA GPU CLOUD

The NVIDIA® GPU Cloud (NGC) manages a catalog of containerized GPU-accelerated software for AI, high-performance computing (HPC), and HPC visualization. Most of these container images are freely available, but some are ‘locked’ and require that you have an NGC account to access them.

By signing up for an account through the NGC website, you can access the locked containers in the NGC container registry and run them on a number of accelerated computing environments. The instructions in this document will assist you in getting started using NGC.
Chapter 2.
BROWSING THE NGC REGISTRY

2.1. Accessing the NGC Website

You can access the NGC website and browse the catalog even if you do not have an NGC account.

From your browser, go to https://ngc.nvidia.com, then click a category of interest.

See the section Browsing the NGC Catalog for further instructions.
2.2. Accessing Your NGC Account

If you do not already have an NGC account, follow the instructions at Signing Up for an NGC Account.

1. Once you have an NGC account, go to https://ngc.nvidia.com/signin/email

2. Enter your email and password, then click Sign in.
   The website opens to the NGC Catalog page.
2.3. Browsing the NGC Catalog

The catalog of GPU-optimized container images for your category appears. You can also select a different category from the top ribbon to see the associated catalog of container images.
Click one of the GPU-optimized container image badges to view information about that container image as well as the available tags that you will use when running the container.

The images below shows information for the PyTorch repository.
What Is PyTorch?

PyTorch is a GPU accelerated tensor computational framework with a Python front end. Functionality can be easily extended with common Python libraries such as NumPy, SciPy and Cython. Automatic differentiation is done with a tape-based system at both a functional and neural network layer level. This functionality brings a high level of flexibility and speed as a deep learning framework and provides accelerated NumPy-like functionality.

Running PyTorch

Before running the container, use `docker pull` to ensure an up-to-date image is installed. Once the pull is complete, you can run the container image.

Procedure

1. Under the Pull Command tab, click the icon to copy the `docker pull` command.

2. Open a command prompt and paste the pull command. The pulling of the container image begins. Ensure the pull completes successfully before proceeding to the next step.

3. Run the container image. To run the container, choose interactive mode or non-interactive mode.

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<th>SIZE</th>
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The following image shows an example of a framework container image that is locked, as indicated by the lock icon highlighted in the upper right corner.
You need to sign up for an account and then obtain an API key to access this container image. See the section Signing Up for an NGC Account for instructions.

Next Steps

You can begin using the containers from the NGC container registry, including locked containers once you have generated an API key.

Be sure to prepare your platform for running the NGC containers. See the following documentation for instructions on setting up your platform as well as information about the latest available framework containers:

- NVIDIA GPU Cloud Documentation
- Preparing to Use Containers (for DGX systems)
- Deep Learning Frameworks - includes a User Guide and individual framework container release notes.
Chapter 3.
SIGNING UP FOR AN NGC ACCOUNT AND LOGGING IN

This section describes the process of signing up for an NGC account.

1. From your browser, go to https://ngc.nvidia.com and then click Register from the upper right of the page.
2. Fill in all the information on the NVIDIA GPU Cloud Sign Up form, then click Sign Up.
You will receive a welcome email with instructions on setting up your account access.
3. Click the link in the welcome email to open the Set Password page in a browser.

4. Follow the instructions to create your password.
You will be signed in to the NGC website at this point. You can sign in at any time by opening the login page at https://ngc.nvidia.com/signin/email and then entering your email and password.

5. The first time that you sign in, you must agree to the NVIDIA GPU Cloud Terms of Use before you can enter the website.

After logging in, the website opens to the NVIDIA GPU Cloud Getting Started screen, which provides the general steps for using NVIDIA GPU Cloud.

6. Click Get Started to open the NGC Catalog page.

See the section Browsing the the NGC Registry for an overview of the website.
Chapter 4.
GENERATING YOUR NGC API KEY

This section describes how to obtain an API key to access locked container images from the NGC Registry.

1. Sign in to the NGC website.

   From a browser, go to https://ngc.nvidia.com/signin/email and then enter your email and password.

   After logging in, the website opens to the NGC Catalog page.

2. Click CONFIGURATION from the left navigation pane to open the Configuration page.
3. Click **Get API key** to open the API Key page.

   The API Key is the mechanism used to authenticate your access to the NGC container registry.

4. Click **Generate API Key** to generate your API key.

   A warning message appears to let you know that your old API key will become invalid if you create a new key.

5. Click **Confirm** to generate the key.

   Your API key appears.

   You only need to generate an API Key once. NGC does not save your key, so store it in a secure place. (You can copy your API Key to the clipboard by clicking the copy icon to the right of the API key.)

   Should you lose your API Key, you can generate a new one from the NGC website. When you generate a new API Key, the old one is invalidated.
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