Docker Hub Quickstart

Estimated reading time: 2 minutes

<u>Docker Hub</u> is a service provided by Docker for finding and sharing container images with your team. It provides the following major features:

- Repositories: Push and pull container images.
- <u>Teams & Organizations</u>: Manage access to private repositories of container images.
- Official Images: Pull and use high-quality container images provided by Docker.
- Publisher Images: Pull and use high- quality container images provided by external vendors.
- <u>Builds</u>: Automatically build container images from GitHub and Bitbucket and push them to Docker
- Webhooks: Trigger actions after a successful push to a repository to integrate Docker Hub with other services.

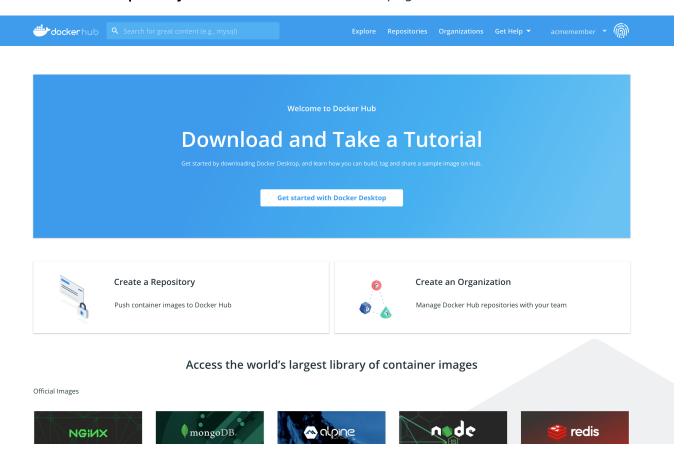
Step 1: Sign up for Docker Hub

Start by <u>creating an account</u>.

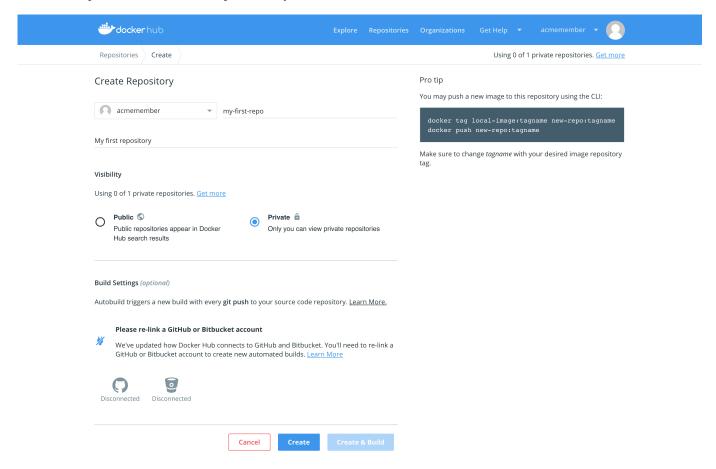
Step 2: Create your first repository

To create a repo:

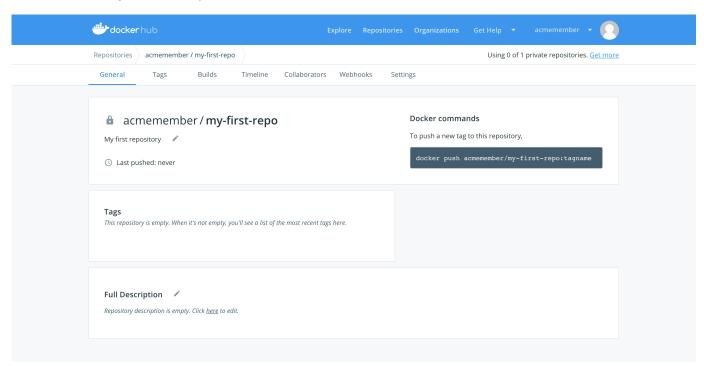
- 1. Sign in to Docker Hub.
- 2. Click on **Create a Repository** on the Docker Hub welcome page:



3. Name it <your-username>/my-first-repo as shown below. Select Private:



You've created your first repo. You should see:



Step 3: Download and install Docker Desktop

We'll need to download Docker Desktop to build and push a container image to Docker Hub.

1. Download and install <u>Docker Desktop</u>. If on Linux, download <u>Docker Engine - Community</u>.

2. Open the terminal and sign in to Docker Hub on your computer by running docker login.

Step 4: Build and push a container image to Docker Hub from your computer

1. Start by creating a **Dockerfile** to specify your application as shown below:

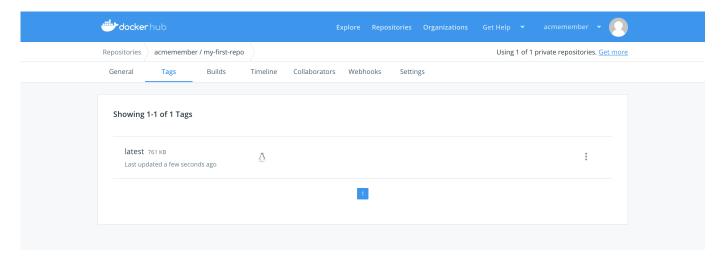
```
cat > Dockerfile <<EOF
FROM busybox
CMD echo "Hello world! This is my first Docker image."
EOF</pre>
```

- 2. Run docker build -t <your_username>/my-first-repo . to build your Docker image.
- 3. Run docker run <your username>/my-first-repo to test your Docker image locally.
- 4. Run docker push <your username>/my-first-repo to push your Docker image to Docker Hub.

You should see output similar to:

```
sh - 103×31
sh-3.2$ cat > Dockerfile <<EOF
> FROM busybox
> CMD echo "Hello world! This is my first Docker image."
sh-3.2$ docker build -t acmemember/my-first-repo .
Sending build context to Docker daemon 3.584kB
Step 1/2 : FROM busybox
---> 59788edf1f3e
Step 2/2 : CMD echo "Hello world! This is my first Docker image."
 ---> Using cache
---> 47ee97a509f4
Successfully built 47ee97a509f4
Successfully tagged acmemember/my-first-repo:latest
sh-3.2$ docker run acmemember/my-first-repo
Hello world! This is my first Docker image.
sh-3.2$ docker push acmemember/my-first-repo
The push refers to repository [docker.io/acmemember/my-first-repo]
8a788232037e: Layer already exists
latest: digest: sha256:b912fcf71a5d966d3003ff015ba14ad88c218b0a24e50e4963c5783f31f5ebd8 size: 527
sh-3.2$
```

And in Docker Hub, your repository should have a new latest tag available under Tags:



Congratulations! You've successfully:

- Signed up for Docker Hub
- Created your first repository
- Built a Docker container image on your computer
- Pushed it to Docker Hub