

Basic docker commands:

1. Docker Version

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\hits> docker version
Client:
 Cloud integration: v1.0.31
 Version: 20.10.24
 API version: 1.41
 Go version: go1.19.7
 Git commit: 297e128
 Built: Tue Apr  4 18:28:08 2023
 OS/Arch: windows/amd64
 Context: default
 Experimental: true

Server: Docker Desktop 4.18.0 (104112)
 Engine:
  Version: 20.10.24
  API version: 1.41 (minimum version 1.12)
  Go version: go1.19.7
  Git commit: 5dc0b84
  Built: Tue Apr  4 18:18:42 2023
  OS/Arch: linux/amd64
  Experimental: false
 containerd:
  Version: 1.6.18
  GitCommit: 2456e983eb9e37e47538f59ea18f2043c9a73640
 runc:
  Version: 1.1.4
  GitCommit: v1.1.4-0-g5fd4c4d
 docker-init:
  Version: 0.19.0
  GitCommit: de40ad0
PS C:\Users\hits>
```

2. Docker info

```
Windows PowerShell
PS C:\Users\hits> docker info
Client:
 Context: default
 Debug Mode: false
 Plugins:
  buildx: Docker Buildx (Docker Inc., v0.10.4)
  compose: Docker Compose (Docker Inc., v2.17.2)
  dev: Docker Dev Environments (Docker Inc., v0.1.0)
  extension: Manages Docker extensions (Docker Inc., v0.2.19)
  init: Creates Docker-related starter files for your project (Docker Inc., v0.1.0-beta.2)
  sbom: View the packaged-based Software Bill Of Materials (SBOM) for an image (Anchore Inc., 0.6.0)
  scan: Docker Scan (Docker Inc., v0.25.0)
  scout: Command line tool for Docker Scout (Docker Inc., v0.9.0)

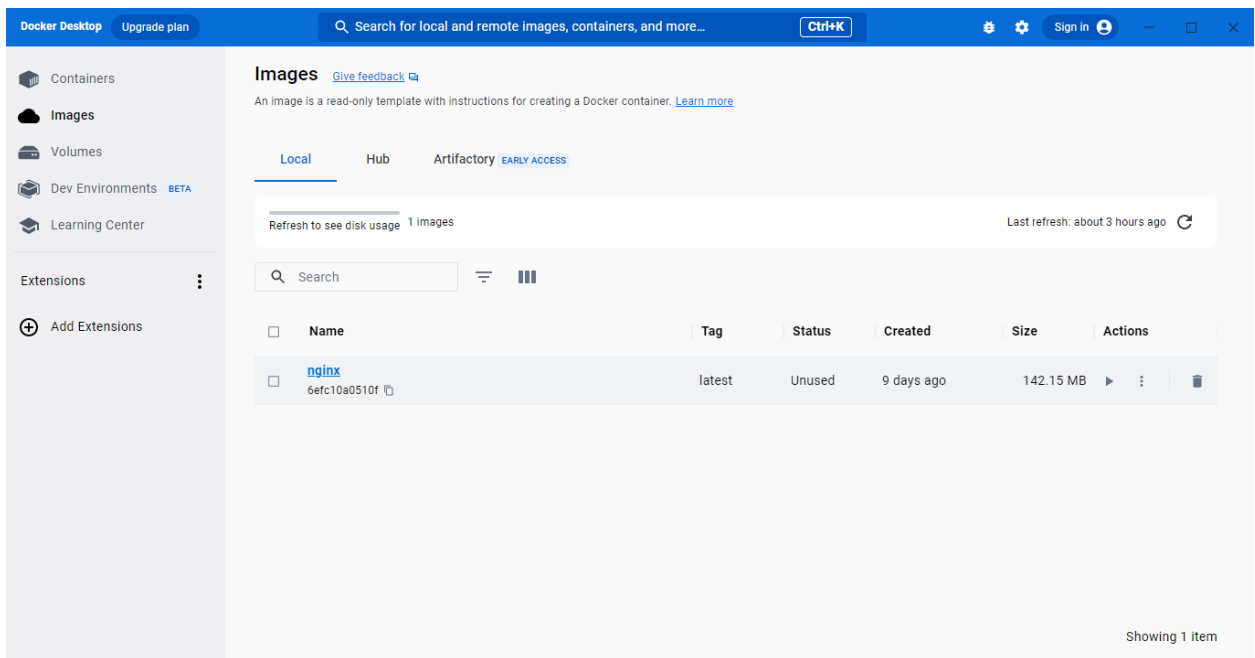
Server:
 Containers: 0
  Running: 0
  Paused: 0
  Stopped: 0
 Images: 0
 Server Version: 20.10.24
 Storage Driver: overlay2
  Backing Filesystem: extfs
  Supports d_type: true
  Native Overlay Diff: true
  userxattr: false
 Logging Driver: json-file
 Cgroup Driver: cgroupfs
 Cgroup Version: 1
 Plugins:
  Volume: local
  Network: bridge host ipvlan macvlan null overlay
  Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog
 Swarm: inactive
 Runtimes: io.containerd.runc.v2 io.containerd.runtime.v1.linux runc
 Default Runtime: runc
 Init Binary: docker-init
 containerd version: 2456e983eb9e37e47538f59ea18f2043c9a73640
 runc version: v1.1.4-0-g5fd4c4d
 init version: de40ad0
 Security Options:
  seccomp
   Profile: default
 Kernel Version: 5.10.16.3-microsoft-standard-WSL2
 Operating System: Docker Desktop
 OSType: linux
 Architecture: x86_64
 CPUs: 4
 Total Memory: 12.4GiB
 Name: docker-desktop
 ID: I3NZ:V3UU:I4F7:UDVQ:2YVK:X3QZ:FAQA:2NSH:QMW7:GHGX:ZRNN:ICDO
```

```
Windows PowerShell
ID: I3NZ:V3UJ:I4F7:UDVQ:2YVK:X3Q2:FAQA:2NSH:QMW7:GHGX:ZRNN:ICDO
Docker Root Dir: /var/lib/docker
Debug Mode: false
HTTP Proxy: http.docker.internal:3128
HTTPS Proxy: http.docker.internal:3128
No Proxy: hubproxy.docker.internal
Registry: https://index.docker.io/v1/
Labels:
Experimental: false
Insecure Registries:
  hubproxy.docker.internal:5555
  127.0.0.0/8
Live Restore Enabled: false

WARNING: No blkio throttle.read_bps_device support
WARNING: No blkio throttle.write_bps_device support
WARNING: No blkio throttle.read_iops_device support
WARNING: No blkio throttle.write_iops_device support
PS C:\Users\hits>
```

3. To add new image in docker

```
Windows PowerShell
PS C:\Users\hits> docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
28c5c85e47da: Pull complete
4f3256bd6f6b: Pull complete
2019c71d5655: Pull complete
8c767bdbc9ae: Pull complete
70e14bb05fd3: Pull complete
75576236abf3: Pull complete
Digest: sha256:63b44e8ddb83d5dd8020327c1f40436e37a6fffd3ef2498a6204df23be6e7e94
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
PS C:\Users\hits>
```



4. To check images in docker

```
Windows PowerShell
PS C:\Users\hits> docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
nginx latest 6efc10a0510f 9 days ago 142MB
PS C:\Users\hits>
```

5. To run the image in docker container and to verify if it is running

```
Windows PowerShell
PS C:\Users\hits> docker run -d -p8080:80 nginx
eb7ea10ae3ab4cd78fe5e8f4f9fb3d50b7266dd61bad4044cd5fee79590d3a25
PS C:\Users\hits> docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS          NAMES
eb7ea10ae3ab   nginx    "/docker-entrypoint..." 28 seconds ago Up 26 seconds 0.0.0.0:8080->80/tcp hopeful_wescoff
PS C:\Users\hits>
```



6. To stop running container

```
Windows PowerShell
PS C:\Users\hits> docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS          NAMES
eb7ea10ae3ab   nginx    "/docker-entrypoint..." 6 minutes ago Up 6 minutes 0.0.0.0:8080->80/tcp hopeful_wescoff
PS C:\Users\hits> docker stop eb7ea10ae3ab
eb7ea10ae3ab
PS C:\Users\hits> docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS          NAMES
PS C:\Users\hits>
```



Unable to connect

Firefox can't establish a connection to the server at localhost:8080.

- The site could be temporarily unavailable or too busy. Try again in a few moments.
- If you are unable to load any pages, check your computer's network connection.
- If your computer or network is protected by a firewall or proxy, make sure that Firefox is permitted to access the web.

Try Again

7. Remove docker images



```
Windows PowerShell
PS C:\Users\hits> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
nginx         latest    6efc10a0510f   9 days ago    142MB
PS C:\Users\hits> docker rm eb7ea10ae3ab
eb7ea10ae3ab
PS C:\Users\hits>
```

The screenshot shows a Windows PowerShell terminal window with a black background and white text. The window title is "Windows PowerShell". The user runs the command `docker images`, which lists the Docker images on the system. The output shows a table with columns: REPOSITORY, TAG, IMAGE ID, CREATED, and SIZE. The only image listed is `nginx:latest` with image ID `6efc10a0510f`, created 9 days ago, and a size of 142MB. Then, the user runs the command `docker rm eb7ea10ae3ab`, which removes the image with ID `eb7ea10ae3ab`. The output shows the image ID `eb7ea10ae3ab` on the next line. The prompt `PS C:\Users\hits>` is shown at the end of the terminal.