Docker

docker info

```
PS C:\Users\Ivan\Desktop> docker info
Client:
 Version:    26.0.0
 Context:    default
 Debug Mode: false
 Plugins:
  buildx: Docker Buildx (Docker Inc.)
    Version:  v0.13.1-desktop.1
    Path:     C:\Program Files\Docker\cli-plugins\docker-buildx.exe
  compose: Docker Compose (Docker Inc.)
    Version:  v2.26.1-desktop.1
    Path:     C:\Program Files\Docker\cli-plugins\docker-compose.exe
  debug: Get a shell into any image or container. (Docker Inc.)
    Version:  0.0.27
    Path:     C:\Program Files\Docker\cli-plugins\docker-debug.exe
  dev: Docker Dev Environments (Docker Inc.)
    Version:  v0.1.2
    Path:     C:\Program Files\Docker\cli-plugins\docker-dev.exe
  extension: Manages Docker extensions (Docker Inc.)
    Version:  v0.2.23
    Path:     C:\Program Files\Docker\cli-plugins\docker-extension.exe
  feedback: Provide feedback, right in your terminal! (Docker Inc.)
    Version:  v1.0.4
    Path:     C:\Program Files\Docker\cli-plugins\docker-feedback.exe
  init: Creates Docker-related starter files for your project (Docker Inc.)
    Version:  v1.1.0
    Path:     C:\Program Files\Docker\cli-plugins\docker-init.exe
  sbom: View the packaged-based Software Bill Of Materials (SBOM) for an image (Anchore Inc.)
    Version:  0.6.0
    Path:     C:\Program Files\Docker\cli-plugins\docker-sbom.exe
  scout: Docker Scout (Docker Inc.)
    Version:  v1.6.3
    Path:     C:\Program Files\Docker\cli-plugins\docker-scout.exe
```

```
Server:
 Containers: 41
  Running: 0
  Paused: 0
  Stopped: 41
 Images: 131
 Server Version: 26.0.0
 Storage Driver: overlay2
  Backing Filesystem: extfs
  Supports d_type: true
  Using metacopy: false
  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 splunk syslog
 Swarm: inactive
 Runtimes: io.containerd.runc.v2 runc
 Default Runtime: runc
 Init Binary: docker-init
 containerd version: ae07eda36dd25f8a1b98dfbf587313b99c0190bb
 runc version: v1.1.12-0-g51d5e94
 init version: de40ad0
 Security Options:
  seccomp
   Profile: unconfined
 Kernel Version: 5.15.146.1-microsoft-standard-WSL2
 Operating System: Docker Desktop
 OSType: linux
 Architecture: x86_64
 CPUs: 8
 Total Memory: 7.66GiB
 Name: docker-desktop
 ID: 0d68704e-4fbc-431f-967a-0e4022303975
 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
 Labels:
  com.docker.desktop.address=npipe://\\.\pipe\docker_cli
 Experimental: false
 Insecure Registries:
  hubproxy.docker.internal:5555
  127.0.0.0/8
 Live Restore Enabled: false
```

docker run -i -t ubuntu /bin/bash

```
PS C:\Users\Ivan\Desktop> docker run -i -t ubuntu /bin/bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
5a7813e071bf: Pull complete
Digest: sha256:72297848456d5d37d1262630108ab308d3e9ec7ed1c3286a32fe09856619a782
Status: Downloaded newer image for ubuntu:latest
root@a7c443126db4:/# hostname
a7c443126db4
root@a7c443126db4:/# hostname -I
172.17.0.2
```

ps -aux

```
root@a7c443126db4:/# ps -aux
USER       PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root         1  0.0  0.0   4588  4072 pts/0    Ss   04:26   0:00 /bin/bash
root        11  0.0  0.0   7888  4184 pts/0    R+   04:32   0:00 ps -aux
```

apt-get update; apt-get install vim

```
root@a7c443126db4:/# apt-get update; apt-get install vim
Get:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble InRelease [256 kB]
Get:3 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [909 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [331 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [841 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble/restricted amd64 Packages [117 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [19.3 MB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [1062 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [34.0 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble/main amd64 Packages [1808 kB]
Get:13 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1163 kB]
Get:14 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [955 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [38.7 kB]
Get:16 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1345 kB]
Get:17 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [16.0 kB]
Fetched 28.6 MB in 6s (4868 kB/s)
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libexpat1 libgpm2 libpython3.12-minimal libpython3.12-stdlib libpython3.12t64 libreadline8t64 libsodium23 libsqlite3-0 media-types netbase
  readline-common tzdata vim-common vim-runtime xxd
Suggested packages:
  gpm readline-doc ctags vim-doc vim-scripts
The following NEW packages will be installed:
  libexpat1 libgpm2 libpython3.12-minimal libpython3.12-stdlib libpython3.12t64 libreadline8t64 libsodium23 libsqlite3-0 media-types netbase
  readline-common tzdata vim vim-common vim-runtime xxd
0 upgraded, 16 newly installed, 0 to remove and 18 not upgraded.
Need to get 16.3 MB of archives.
After this operation, 72.1 MB of additional disk space will be used.
Do you want to continue? [Y/n] n
Abort.
```

docker ps

```
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID   IMAGE     COMMAND        CREATED          STATUS          PORTS     NAMES
a7c443126db4   ubuntu    "/bin/bash"    14 minutes ago   Up 14 minutes             compassionate_saha
```

docker ps -a

```
PS C:\Users\Ivan\Desktop> docker ps -a
CONTAINER ID   IMAGE     COMMAND        CREATED          STATUS          PORTS     NAMES
a7c443126db4   ubuntu    "/bin/bash"    12 minutes ago   Up 12 minutes             compassionate_saha
```

docker ps -l

```
PS C:\Users\Ivan\Desktop> docker ps -l
CONTAINER ID   IMAGE     COMMAND        CREATED          STATUS          PORTS     NAMES
a7c443126db4   ubuntu    "/bin/bash"    14 minutes ago   Up 14 minutes             compassionate_saha
```

docker run --name my_first_container -i -t ubuntu /bin/bash

```
PS C:\Users\Ivan\Desktop> docker run --name my_first_container -i -t ubuntu /bin/bash
root@7f9580fd3113:/# exit
exit
```

docker ps -a

```
PS C:\Users\Ivan\Desktop> docker ps -a
CONTAINER ID   IMAGE      COMMAND         CREATED            STATUS                PORTS        NAMES
7f9580fd3113   ubuntu     "/bin/bash"     About a minute ago Exited (0) 7 seconds ago           my_first_container
```

docker start my_first_container

```
PS C:\Users\Ivan\Desktop> docker start my_first_container
my_first_container
```

docker start 7f9580fd3113

```
PS C:\Users\Ivan\Desktop> docker start 7f9580fd3113
7f9580fd3113
```

docker ps

```
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID   IMAGE      COMMAND         CREATED          STATUS               PORTS        NAMES
7f9580fd3113   ubuntu     "/bin/bash"     5 minutes ago    Up About a minute                 my_first_container
a7c443126db4   ubuntu     "/bin/bash"     22 minutes ago   Up 22 minutes                     compassionate_saha
```

docker attach my_first_container

```
PS C:\Users\Ivan\Desktop> docker attach my_first_container
root@7f9580fd3113:/# exit
exit
```

docker run –name daemon_dave –d ubuntu /bin/sh

–c "while true; do echo Hello World!; sleep 1; done"

```
PS C:\Users\Ivan\Desktop> docker run --name daemon_dave -d ubuntu /bin/sh -c "while true; do echo Hello World!; sleep 1; done"
3b7d39d02c186861e07429b7eaf36378247ef37cbbe24c22c2b13f55e7ec1491
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID   IMAGE      COMMAND                CREATED          STATUS           PORTS        NAMES
3b7d39d02c18   ubuntu     "/bin/sh -c 'while t…"  3 seconds ago    Up 2 seconds                  daemon_dave
a7c443126db4   ubuntu     "/bin/bash"             28 minutes ago   Up 28 minutes                 compassionate_saha
```

docker logs daemon_dave

docker logs –f daemon_dave

```
PS C:\Users\Ivan\Desktop> docker logs daemon_dave
Hello World!
Hello World!
Hello World!
Hello World!
Hello World!
```

docker logs –tail 3 daemon_dave

```
PS C:\Users\Ivan\Desktop> docker logs --tail 3 daemon_dave
Hello World!
Hello World!
Hello World!
```

docker top daemon_dave

```
PS C:\Users\Ivan\Desktop> docker top daemon_dave
UID        PID         PPID        C    STIME    TTY    TIME
    CMD
root       1181        1161        0    04:54    ?      00:00:00    /bin/sh -c while true; do echo Hello World!; sleep 1; done
root       1608        1181        0    05:01    ?      00:00:00    sleep 1
```

docker stats daemon_dave

```
PS C:\Users\Ivan\Desktop> docker stats daemon_dave
CONTAINER ID   NAME          CPU %    MEM USAGE / LIMIT   MEM %   NET I/O           BLOCK I/O    PIDS
3b7d39d02c18   daemon_dave   0.03%    548KiB / 7.66GiB    0.01%   2.08kB / 1.01kB   0B / 0B      2
CONTAINER ID   NAME          CPU %    MEM USAGE / LIMIT   MEM %   NET I/O           BLOCK I/O    PIDS
3b7d39d02c18   daemon_dave   0.11%    648KiB / 7.66GiB    0.01%   2.08kB / 1.01kB   0B / 0B      2
```

...

docker exec -d daemon_dave touch /etc/first_file

docker exec -i -t daemon_dave /bin/bash

```
PS C:\Users\Ivan\Desktop> docker exec -d daemon_dave touch /etc/first_file
PS C:\Users\Ivan\Desktop> docker exec -i -t daemon_dave /bin/bash
root@3b7d39d02c18:/# ls -l
total 48
lrwxrwxrwx   1 root root      7 Apr 22  2024 bin -> usr/bin
drwxr-xr-x   2 root root   4096 Apr 22  2024 boot
drwxr-xr-x   5 root root    340 Mar 10 04:54 dev
drwxr-xr-x   1 root root   4096 Mar 10 05:08 etc
drwxr-xr-x   3 root root   4096 Jan 27 02:09 home
lrwxrwxrwx   1 root root      7 Apr 22  2024 lib -> usr/lib
lrwxrwxrwx   1 root root      9 Apr 22  2024 lib64 -> usr/lib64
drwxr-xr-x   2 root root   4096 Jan 27 02:03 media
drwxr-xr-x   2 root root   4096 Jan 27 02:03 mnt
drwxr-xr-x   2 root root   4096 Jan 27 02:03 opt
dr-xr-xr-x 222 root root      0 Mar 10 04:54 proc
drwx------   2 root root   4096 Jan 27 02:09 root
drwxr-xr-x   4 root root   4096 Jan 27 02:09 run
lrwxrwxrwx   1 root root      8 Apr 22  2024 sbin -> usr/sbin
drwxr-xr-x   2 root root   4096 Jan 27 02:03 srv
dr-xr-xr-x  11 root root      0 Mar 10 04:54 sys
drwxrwxrwt   2 root root   4096 Jan 27 02:09 tmp
drwxr-xr-x  12 root root   4096 Jan 27 02:03 usr
drwxr-xr-x  11 root root   4096 Jan 27 02:09 var
root@3b7d39d02c18:/# cd etc
```

```
-rw-r--r-- 1 root root        0 Mar 10 05:08 first_file
```

```
root@3b7d39d02c18:/etc# touch second_file
root@3b7d39d02c18:/etc# ls - l
```

```
-rw-r--r-- 1 root root        0 Mar 10 05:10 second_file
```

docker stop daemon_dave

docker stop 3b7d39d02c18

```
PS C:\Users\Ivan\Desktop> docker stop daemon_dave
daemon_dave
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID   IMAGE      COMMAND       CREATED         STATUS          PORTS     NAMES
a7c443126db4   ubuntu     "/bin/bash"   46 minutes ago  Up 46 minutes             compassionate_saha
PS C:\Users\Ivan\Desktop> docker ps -a
CONTAINER ID   IMAGE              COMMAND               CREATED         STATUS                  PORTS     NAMES
3b7d39d02c18   ubuntu             "/bin/sh -c 'while t…" 17 minutes ago Exited (137) 14 seconds ago       daemon_dave
```

docker run --restart=always --name daemon_alice -d ubuntu /bin/sh

-c "while true; do echo Hello World!!!; sleep 1; done"

```
PS C:\Users\Ivan\Desktop> docker run --restart=always --name daemon_alice -d ubuntu /bin/sh -c "while true; do echo Hello World!!!; sleep 1; done"
d0d722fc484896e519e4cd4697769b9e57ad5acacf31036c161299adc8cf475a
```

docker run --restart=on-failure:5 --name daemon_max -d ubuntu /bin/sh

-c "while true; do echo Hello World!!!; sleep 1; done"

```
PS C:\Users\Ivan\Desktop> docker run --restart=on-failure:5 --name daemon_max -d ubuntu /bin/sh -c "while true; do echo Hello World!!!; sleep 1; done"
5895e5e53131c721eb4b9e6db598468ae14a91d8945c5e95e8e2c212e6a21e37
```

docker inspect daemon_max

```
PS C:\Users\Ivan\Desktop> docker inspect daemon_max
[
    {
        "Id": "5895e5e53131c721eb4b9e6db598468ae14a91d8945c5e95e8e2c212e6a21e37",
        "Created": "2025-03-10T05:18:54.763396803Z",
        "Path": "/bin/sh",
        "Args": [
            "-c",
            "while true; do echo Hello World!!!; sleep 1; done"
        ],
        "State": {
            "Status": "exited",
            "Running": false,
            "Paused": false,
            "Restarting": false,
            "OOMKilled": false,
            "Dead": false,
            "Pid": 0,
            "ExitCode": 137,
            "Error": "",
            "StartedAt": "2025-03-10T05:18:55.08703631Z",
            "FinishedAt": "2025-03-10T05:19:18.986545981Z"
        },
```

...

docker inspect -f "{{ .State.Running }}" daemon_alice

docker inspect --format "{{ .State.Running }}" daemon_max

```
PS C:\Users\Ivan\Desktop> docker start daemon_alice
daemon_alice
PS C:\Users\Ivan\Desktop> docker start daemon_max
daemon_max
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID    IMAGE     COMMAND              CREATED         STATUS          PORTS     NAMES
5895e5e53131    ubuntu    "/bin/sh -c 'while t…"   4 minutes ago   Up 1 second               daemon_max
d0d722fc4848    ubuntu    "/bin/sh -c 'while t…"   7 minutes ago   Up 5 seconds              daemon_alice
a7c443126db4    ubuntu    "/bin/bash"          57 minutes ago  Up 57 minutes             compassionate_saha
```

```
PS C:\Users\Ivan\Desktop> docker start daemon_alice
daemon_alice
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID    IMAGE     COMMAND              CREATED          STATUS          PORTS     NAMES
d0d722fc4848    ubuntu    "/bin/sh -c 'while t…"   10 minutes ago   Up 2 seconds              daemon_alice
a7c443126db4    ubuntu    "/bin/bash"          59 minutes ago   Up 59 minutes             compassionate_saha
PS C:\Users\Ivan\Desktop> docker inspect --format "{{ .State.Running }}" daemon_alice
true
PS C:\Users\Ivan\Desktop> docker inspect --format "{{ .State.Running }}" daemon_max
false
```

PS C:\Users\Ivan\Desktop> docker inspect

--format "{{ .Name }} {{ .State.Running }}" daemon_alice daemon_max

```
PS C:\Users\Ivan\Desktop> docker inspect --format "{{ .Name }} {{ .State.Running }}" daemon_alice daemon_max
/daemon_alice false
/daemon_max false
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID    IMAGE     COMMAND         CREATED            STATUS          PORTS     NAMES
a7c443126db4    ubuntu    "/bin/bash"     About an hour ago  Up About an hour          compassionate_saha
PS C:\Users\Ivan\Desktop> docker start daemon_alice daemon_max
daemon_alice
daemon_max
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID    IMAGE     COMMAND              CREATED            STATUS          PORTS     NAMES
5895e5e53131    ubuntu    "/bin/sh -c 'while t…"   10 minutes ago     Up 4 seconds              daemon_max
d0d722fc4848    ubuntu    "/bin/sh -c 'while t…"   13 minutes ago     Up 5 seconds              daemon_alice
a7c443126db4    ubuntu    "/bin/bash"          About an hour ago  Up About an hour          compassionate_saha
PS C:\Users\Ivan\Desktop> docker inspect -f "{{ .Name }} {{ .State.Running }}" daemon_alice daemon_max
/daemon_alice true
/daemon_max true
```

docker rm daemon_alice daemon_max

```
PS C:\Users\Ivan\Desktop> docker ps
CONTAINER ID    IMAGE     COMMAND              CREATED         STATUS          PORTS     NAMES
5895e5e53131    ubuntu    "/bin/sh -c 'while t…"   13 minutes ago  Up 47 seconds             daemon_max
d0d722fc4848    ubuntu    "/bin/sh -c 'while t…"   16 minutes ago  Up 47 seconds             daemon_alice
a7c443126db4    ubuntu    "/bin/bash"          About an hour ago  Up About an hour          compassionate_saha
PS C:\Users\Ivan\Desktop> docker stop d0d722fc4848 5895e5e53131
d0d722fc4848
5895e5e53131
PS C:\Users\Ivan\Desktop> docker rm daemon_alice daemon_max
daemon_alice
daemon_max
PS C:\Users\Ivan\Desktop> docker ps -a
CONTAINER ID    IMAGE     COMMAND              CREATED         STATUS              PORTS     NAMES
3b7d39d02c18    ubuntu    "/bin/sh -c 'while t…"   38 minutes ago  Exited (137) 20 minutes ago          daemon_dave
```

docker images

```
PS C:\Users\Ivan\Desktop> docker images
REPOSITORY                  TAG       IMAGE ID        CREATED        SIZE
ubuntu                      latest    a04dc4851cbc    6 weeks ago    78.1MB
```

docker pull ubuntu:18.04

```
PS C:\Users\Ivan\Desktop> docker pull ubuntu:18.04
18.04: Pulling from library/ubuntu
7c457f213c76: Pull complete
Digest: sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324b2bb2e43c98
Status: Downloaded newer image for ubuntu:18.04
docker.io/library/ubuntu:18.04
```

docker images

```
PS C:\Users\Ivan\Desktop> docker images
REPOSITORY                  TAG       IMAGE ID        CREATED          SIZE
ubuntu                      18.04     f9a80a55f492    21 months ago    63.2MB
```

docker run -i -t --name my_new_container ubuntu:18.04 /bin/bash

```
PS C:\Users\Ivan\Desktop> docker run -i -t --name my_new_container ubuntu:18.04 /bin/bash
root@3a5fbf38e901:/#
```

docker search puppet

```
PS C:\Users\Ivan\Desktop> docker search puppet
NAME                                              DESCRIPTION                                         STARS    OFFICIAL
puppet/continuous-delivery-for-puppet-enterprise  Automated testing and promotion of infrastru…      7
puppet/puppetserver                               A Docker Image for running Puppet Server. Wi…      116
puppet/puppetboard                                The Puppet Board dashboard for PuppetDB            20
puppet/puppetdb                                   A Docker image for running PuppetDB                38
puppet/puppet-dev-tools                           Puppet development tools such as PDK, onceov…      9
puppet/puppet-agent                               Puppet Agent as a Docker Image.                    16
puppet/puppet-agent-alpine                        Puppet Agent as a Docker Image. Based on Alp…      17
puppet/puppet-agent-ubuntu                        Puppet Agent as a Docker Image. Based on the…      13
puppet/pdk                                        Puppet Development Kit (PDK)                        3
puppet/r10k                                       r10k on a Docker image. Based on Alpine             4
puppet/puppet-bolt                                Puppet Bolt as a docker image                       4
puppet/puppetexplorer                             The Puppet Explorer dashboard for PuppetDB         13
puppet/facter                                     Facter as a Docker Image                            3
puppet/lumogon                                    Lumogon is the best way to inspect, analyze …      5
puppet/tlser                                      A tiny utility for ensuring TLS certificates…      0
puppet/kubetool                                                                                       1
puppet/gogrpc                                     A container for building golang projects tha…      2
puppet/discocoreui                                A Docker container used to build Discovery C…      3
puppet/iac_release                                                                                    0
jumanjiman/puppet                                 Use Puppet to configure CoreOS hosts                3
puppet/pipelines                                  Puppet Pipelines                                    0
puppet/autogenic                                                                                      0
puppet/puppet-inventory                                                                               2
puppet/kerminator-build-image                                                                         0
puppet/estate-reporting-query                                                                         0
```

docker login

```
PS C:\Users\Ivan\Desktop> docker login
Log in with your Docker ID or email address to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com/ to create one.
You can log in with your password or a Personal Access Token (PAT). Using a limited-scope PAT grants better security and is required for organizations using SSO. Learn mo
re at https://docs.docker.com/go/access-tokens/

Username: ivkeex
Password:

Login Succeeded
```

docker logout

docker run -i -t ubuntu /bin/bash

```
PS C:\Users\Ivan\Desktop> docker run -i -t ubuntu /bin/bash
root@23a483cb7b6f:/# apt-get -yqq update
root@23a483cb7b6f:/# apt-get -y install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
```

...

docker ps -l -q

```
PS C:\Users\Ivan\Desktop> docker ps -l -q
23a483cb7b6f
```

docker commit 23a483cb7b6f apache2

```
PS C:\Users\Ivan\Desktop> docker commit 23a483cb7b6f apache2
sha256:3f7d0c228e8e35fe3ec2fe07337cd54e92b06c1f48cccb55cb0af6c2c135dea1
```

docker images apache2

```
PS C:\Users\Ivan\Desktop> docker images apache2
REPOSITORY      TAG        IMAGE ID        CREATED           SIZE
apache2         latest     3f7d0c228e8e    2 minutes ago     245MB
```

docker commit -m "A New Custom Image!" -a "Ivan Pupinoski"

23a483cb7b6f apache2:webserver

```
PS C:\Users\Ivan\Desktop> docker commit -m  "A New Custom Image!" -a "Ivan Pupinoski" 23a483cb7b6f apache2:webserver
sha256:11067ca7fc519ff6b9a5304e663f399bf10d7571fd456f51c9f428f3102a982b
```

docker inspect apache2:webserver

```
PS C:\Users\Ivan\Desktop> docker inspect apache2:webserver
[
    {
        "Id": "sha256:11067ca7fc519ff6b9a5304e663f399bf10d7571fd456f51c9f428f3102a982b",
        "RepoTags": [
            "apache2:webserver"
        ],
        "RepoDigests": [],
        "Parent": "sha256:a04dc4851cbcbb42b54d1f52a41f5f9eca6a5fd03748c3f6eb2cbeb238ca99bd",
        "Comment": "A New Custom Image!",
        "Created": "2025-03-10T06:32:22.466516569Z",
        "ContainerConfig": {
            "Hostname": "",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": false,
            "AttachStderr": false,
            "Tty": false,
            "OpenStdin": false,
            "StdinOnce": false,
            "Env": null,
            "Cmd": null,
            "Image": "",
            "Volumes": null,
            "WorkingDir": "",
            "Entrypoint": null,
            "OnBuild": null,
            "Labels": null
        },
```

docker run -i -t apache2:webserver /bin/bash

```
PS C:\Users\Ivan\Desktop> docker run -i -t apache2:webserver /bin/bash
root@f8181ae389b8:/# service apache2 status
 * apache2 is not running
```

```
PS C:\Users\Ivan\Desktop> mkdir static_web


    Directory: C:\Users\Ivan\Desktop


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----         3/10/2025   7:36 AM                static_web


PS C:\Users\Ivan\Desktop> cd .\static_web\
```

```
docker build -t="ivanpupinoski03@gmail.com" .
```

```
Rename-Item -Path "Dockerfile.txt" -NewName "Dockerfile"
```

```
PS C:\Users\Ivan\Desktop> cd .\static_web\
PS C:\Users\Ivan\Desktop\static_web> ls


    Directory: C:\Users\Ivan\Desktop\static_web


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a----         3/10/2025   7:46 AM            191 Dockerfile.txt


PS C:\Users\Ivan\Desktop\static_web> Rename-Item -Path "Dockerfile.txt" -NewName "Dockerfile"
PS C:\Users\Ivan\Desktop\static_web> ls


    Directory: C:\Users\Ivan\Desktop\static_web


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a----         3/10/2025   7:46 AM            191 Dockerfile


PS C:\Users\Ivan\Desktop\static_web> docker build -t ivKeeX/static_web .
[+] Building 0.0s (0/0)  docker:default
[+] Building 18.8s (8/8) FINISHED                                                                        docker:default
 => [internal] load build definition from Dockerfile                                                              0.0s
 => => transferring dockerfile: 230B                                                                              0.0s
 => [internal] load metadata for docker.io/library/ubuntu:18.04                                                   1.9s
 => [auth] library/ubuntu:pull token for registry-1.docker.io                                                     0.0s
 => [internal] load .dockerignore                                                                                 0.0s
 => => transferring context: 2B                                                                                   0.0s
 => [1/3] FROM docker.io/library/ubuntu:18.04@sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324b2bb2e43c98  0.0s
 => => resolve docker.io/library/ubuntu:18.04@sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324b2bb2e43c98  0.0s
 => => sha256:f9a80a55f492e823bf5d51f1bd5f87ea3eed1cb31788686aa99a2fb61a27af6a 2.30kB / 2.30kB                    0.0s
 => => sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324b2bb2e43c98 1.33kB / 1.33kB                    0.0s
 => => sha256:dca176c9663a7ba4c1f0e710986f5a25e672842963d95b960191e2d9f7185ebe 424B / 424B                        0.0s
 => [2/3] RUN apt-get update && apt-get install -y nginx                                                         16.1s
 => [3/3] RUN echo 'Hi, I am in your container!' > /var/www/html/index.html                                       0.4s
 => exporting to image                                                                                            0.3s
 => => exporting layers                                                                                           0.3s
 => => writing image sha256:19c887b55874b4bd057c845db2e413531ffb41314e8518c8787aa4e1b45f24be                      0.0s
 => => naming to ivKeeX/static_web                                                                                0.0s
```

```
docker build -t="ivKeeX/static_web:v1" .
```

```
PS C:\Users\Ivan\Desktop\static_web> docker build -t="ivKeeX/static_web:v1" .
[+] Building 0.0s (0/0)  docker:default
[+] Building 0.9s (7/7) FINISHED                                                                         docker:default
 => [internal] load build definition from Dockerfile                                                              0.0s
 => => transferring dockerfile: 230B                                                                              0.0s
 => [internal] load metadata for docker.io/library/ubuntu:18.04                                                   0.8s
 => [internal] load .dockerignore                                                                                 0.0s
 => => transferring context: 2B                                                                                   0.0s
 => [1/3] FROM docker.io/library/ubuntu:18.04@sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324b2bb2e43c98  0.0s
 => CACHED [2/3] RUN apt-get update && apt-get install -y nginx                                                   0.0s
 => CACHED [3/3] RUN echo 'Hi, I am in your container!' > /var/www/html/index.html                                0.0s
 => exporting to image                                                                                            0.0s
 => => exporting layers                                                                                           0.0s
 => => writing image sha256:19c887b55874b4bd057c845db2e413531ffb41314e8518c8787aa4e1b45f24be                      0.0s
 => => naming to ivKeeX/static_web:v1                                                                             0.0s
```

```
docker images
```

```
PS C:\Users\Ivan\Desktop\static_web> docker images
REPOSITORY            TAG           IMAGE ID        CREATED           SIZE
ivKeeX/static_web     latest        19c887b55874    3 minutes ago     169MB
ivKeeX/static_web     v1            19c887b55874    3 minutes ago     169MB
apache2               webserver     11067ca7fc51    18 minutes ago    245MB
apache2               latest        3f7d0c228e8e    22 minutes ago    245MB
ubuntu                latest        a04dc4851cbc    6 weeks ago       78.1MB
```

```
docker build --no-cache -t="ivKeeX/static_web" .
```

```
PS C:\Users\Ivan\Desktop\static_web> docker build --no-cache -t="ivKeeX/static_web" .
2025/03/10 07:59:04 http2: server: error reading preface from client //./pipe/docker_engine: file has already been closed
[+] Building 0.0s (0/0)  docker:default
[+] Building 19.3s (8/8) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 230B
 => [internal] load metadata for docker.io/library/ubuntu:18.04
 => [auth] library/ubuntu:pull token for registry-1.docker.io
 => [internal] load .dockerignore
 => => transferring context: 2B
 => CACHED [1/3] FROM docker.io/library/ubuntu:18.04@sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324b2bb2e43c98
 => [2/3] RUN apt-get update && apt-get install -y nginx
 => [3/3] RUN echo 'Hi, I am in your container!' > /var/www/html/index.html
 => exporting to image
 => => exporting layers
 => => writing image sha256:46b7c0cfb1de759156c47c241e329b42bc8cd778178e28386429461b992b62a0
 => => naming to ivKeeX/static_web
```

docker history 46b7c0cfb1de

```
PS C:\Users\Ivan\Desktop\static_web> docker images ivKeeX/static_web
REPOSITORY          TAG       IMAGE ID       CREATED           SIZE
ivKeeX/static_web   latest    46b7c0cfb1de   About a minute ago   169MB
ivKeeX/static_web   v1        19c887b55874   13 minutes ago    169MB
PS C:\Users\Ivan\Desktop\static_web> docker history 46b7c0cfb1de
IMAGE          CREATED            CREATED BY                                      SIZE      COMMENT
46b7c0cfb1de   About a minute ago   EXPOSE map[80/tcp:{}]                           0B        buildkit.dockerfile.v0
<missing>      About a minute ago   RUN /bin/sh -c echo 'Hi, I am in your contai…   28B       buildkit.dockerfile.v0
<missing>      About a minute ago   RUN /bin/sh -c apt-get update && apt-get ins…   106MB     buildkit.dockerfile.v0
<missing>      About a minute ago   LABEL maintainer=ivanpupinoski03@gmail.com      0B        buildkit.dockerfile.v0
<missing>      21 months ago      /bin/sh -c #(nop)  CMD ["/bin/bash"]            0B
<missing>      21 months ago      /bin/sh -c #(nop) ADD file:3c74e7e08cbf9a876…   63.2MB
<missing>      21 months ago      /bin/sh -c #(nop)  LABEL org.opencontainers.…   0B
<missing>      21 months ago      /bin/sh -c #(nop)  LABEL org.opencontainers.…   0B
<missing>      21 months ago      /bin/sh -c #(nop)  ARG LAUNCHPAD_BUILD_ARCH     0B
<missing>      21 months ago      /bin/sh -c #(nop)  ARG RELEASE                  0B
```

docker run -d -p 80 --name static_web ivKeeX/static_web nginx

-g "daemon off;"

```
PS C:\Users\Ivan\Desktop> docker run -d -p 80 --name static_web ivKeeX/static_web nginx -g "daemon off;"
8fe8d54d599424820683a221d9ccbfc6f024a5f245761402388560abbb27adc9
```

docker ps -l

```
PS C:\Users\Ivan\Desktop> docker ps -l
CONTAINER ID   IMAGE               COMMAND                CREATED         STATUS         PORTS                    NAMES
8fe8d54d5994   ivKeeX/static_web   "nginx -g 'daemon of…"   7 seconds ago   Up 6 seconds   0.0.0.0:65310->80/tcp    static_web
```

docker port 8fe8d54d5994 80

```
PS C:\Users\Ivan\Desktop> docker port 8fe8d54d5994 80
0.0.0.0:65310
```

docker port static_web 80

```
PS C:\Users\Ivan\Desktop> docker port static_web 80
0.0.0.0:65310
```

docker run -d -p 80:80 --name static_web_port_80 ivKeeX/static_web

nginx -g "daemon off;"

```
PS C:\Users\Ivan\Desktop> docker run -d -p 80:80 --name static_web_port_80 ivKeeX/static_web nginx -g "daemon off;"
551cae8d6d7e1ac68dc3d690bc65c0951794731763882dc01c6c9bf7c745df8d
PS C:\Users\Ivan\Desktop> docker ps -l
CONTAINER ID   IMAGE               COMMAND                CREATED         STATUS         PORTS                 NAMES
551cae8d6d7e   ivKeeX/static_web   "nginx -g 'daemon of…"   7 seconds ago   Up 7 seconds   0.0.0.0:80->80/tcp    static_web_port_80
```

docker run -d -p 127.0.0.1::80 --name static_web_random_port

ivKeeX/static_web nginx -g "daemon off;"

```
PS C:\Users\Ivan\Desktop> docker run -d -p 127.0.0.1::80 --name static_web_random_port ivKeeX/static_web nginx -g "daemon off;"
f340c1cfbc3f1d138dfa1fb7826c933bccc4b0075629e52a9b1207392ac9a8c8
```

```
PS C:\Users\Ivan\Desktop> docker ps -l
CONTAINER ID   IMAGE               COMMAND                CREATED         STATUS         PORTS                       NAMES
f340c1cfbc3f   ivKeeX/static_web   "nginx -g 'daemon of…"   8 seconds ago   Up 8 seconds   127.0.0.1:65454->80/tcp     static_web_random_port
```

```
docker run -d -P --name static_web_all_exposed ivKeeX/static_web
nginx -g "daemon off;"
```

```
PS C:\Users\Ivan\Desktop> docker run -d -P --name static_web_all_exposed ivKeeX/static_web nginx -g "daemon off;"
81580fee9324f58abad88192c40c3f5bb1d83d73fce57032f09b58e0a3bba775
PS C:\Users\Ivan\Desktop> docker ps -l
CONTAINER ID    IMAGE               COMMAND                CREATED        STATUS         PORTS                   NAMES
81580fee9324    ivKeeX/static_web   "nginx -g 'daemon of…"  4 seconds ago  Up 3 seconds   0.0.0.0:32768->80/tcp   static_web_all_exposed
```

```
PS C:\Users\Ivan\Desktop\dockerfile-test> notepad Dockerfile
```

```
FROM ubuntu:18.04
LABEL maintainer="ivanpupinoski03@gmail.com"
RUN apt-get update; apt-get install -y apache2
ENV APACHE_RUN_USER www-data
ENV APACHE_RUN_GROUP www-data
ENV APACHE_LOG_DIR /var/log/apache2
ENV APACHE_PID_FILE /var/run/apache2.pid
ENV APACHE_RUN_DIR /var/run/apache2
ENV APACHE_LOCK_DIR /var/lock/apache2
COPY . /var/www/
EXPOSE 80
ENTRYPOINT ["/usr/sbin/apachectl']
CMD ["-D", "FOREGROUND"]
```

```
Rename-Item -Path "Dockerfile.txt" -NewName "Dockerfile"
```

```
PS C:\Users\Ivan\Desktop\dockerfile-test> Rename-Item -Path "Dockerfile.txt" -NewName "Dockerfile"
```

```
docker build -t ivkeex/apache2 .
```

```
PS C:\Users\Ivan\Desktop\dockerfile-test> docker build -t ivkeex/apache2 .
2025/03/10 19:38:09 http2: server: error reading preface from client //./pipe/docker_engine: file has already been closed
[+] Building 0.0s (0/0)  docker:default
2025/03/10 19:38:09 http2: server: error reading preface from client //./pipe/docker_engine: file has already been close[+] Building 20.8s (9/9) FINISHED
                                                                docker:default
 => [internal] load build definition from Dockerfile                                          0.0s
 => => transferring dockerfile: 457B                                                          0.0s
 => [internal] load metadata for docker.io/library/ubuntu:18.04                               1.4s
 => [auth] library/ubuntu:pull token for registry-1.docker.io                                 0.0s
 => [internal] load .dockerignore                                                             0.0s
 => => transferring context: 2B                                                               0.0s
 => CACHED [1/3] FROM docker.io/library/ubuntu:18.04@sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324  0.0s
 => [internal] load build context                                                             0.0s
 => => transferring context: 457B                                                             0.0s
 => [2/3] RUN apt-get update; apt-get install -y apache2                                       18.8s
 => [3/3] COPY . /var/www/                                                                     0.0s
 => exporting to image                                                                        0.5s
 => => exporting layers                                                                       0.4s
 => => writing image sha256:1ee3388a784e39b53a0cb7c72693cff485185082cbaabc886bbd14e5932e8356  0.0s
 => => naming to docker.io/ivkeex/apache2                                                     0.0s
```

```
docker build --no-cache -t="ivkeex/static_web" .
```
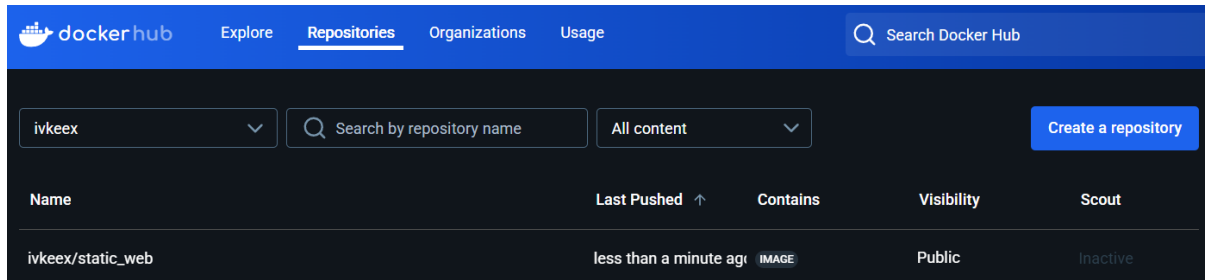
```
PS C:\Users\Ivan\Desktop\static_web> docker login
Authenticating with existing credentials...
Login Succeeded
```

```
docker build --no-cache -t="ivkeex/static_web" .
```

```
PS C:\Users\Ivan\Desktop\static_web> docker build --no-cache -t="ivkeex/static_web" .
[+] Building 14.9s (8/8) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 230B
 => [internal] load metadata for docker.io/library/ubuntu:18.04
 => [auth] library/ubuntu:pull token for registry-1.docker.io
 => [internal] load .dockerignore
 => => transferring context: 2B
 => CACHED [1/3] FROM docker.io/library/ubuntu:18.04@sha256:152dc042452c496007f07ca9127571cb9c29697f42acbfad72324b2bb2e43c98
 => [2/3] RUN apt-get update && apt-get install -y nginx
 => [3/3] RUN echo 'Hi, I am in your container!' > /var/www/html/index.html
 => exporting to image
 => => exporting layers
 => => writing image sha256:71bbacf87bdaa8b728dde8aa683cd4c73dfefdeff89284ed437526e262e64d2d
 => => naming to docker.io/ivkeex/static_web
```

docker push ivkeex/static_web

```
PS C:\Users\Ivan\Desktop\static_web> docker push ivkeex/static_web
Using default tag: latest
The push refers to repository [docker.io/ivkeex/static_web]
061cb736434c: Pushed
3399f3a0de17: Pushed
548a79621a42: Mounted from library/ubuntu
latest: digest: sha256:78c2f38457286677bded942fa3d1ba06d4c4bf9ef342b8bc3de01ecc63f6a1f5 size: 948
```

docker hub	Explore	Repositories	Organizations	Usage	Search Docker Hub

ivkeex ▾	Search by repository name	All content ▾			Create a repository

Name	Last Pushed ↑	Contains	Visibility	Scout
ivkeex/static_web	less than a minute ago IMAGE		Public	Inactive

docker images

```
PS C:\Users\Ivan\Desktop> docker images
REPOSITORY              TAG           IMAGE ID        CREATED          SIZE
ivkeex/static_web       latest        71bbacf87bda    4 minutes ago    169MB
static_web              latest        7c80183e0682    8 minutes ago    169MB
ivkeex/apache2          latest        1ee3388a784e    12 minutes ago   205MB
ivKeeX/static_web       v1            19c887b55874    12 hours ago     169MB
apache2                 webserver     11067ca7fc51    12 hours ago     245MB
apache2                 latest        3f7d0c228e8e    12 hours ago     245MB
ubuntu                  latest        a04dc4851cbc    6 weeks ago      78.1MB
```

docker rmi ivkeex/static_web

```
PS C:\Users\Ivan\Desktop> docker rmi ivkeex/static_web
Untagged: ivkeex/static_web:latest
Untagged: ivkeex/static_web@sha256:78c2f38457286677bded942fa3d1ba06d4c4bf9ef342b8bc3de01ecc63f6a1f5
Deleted: sha256:71bbacf87bdaa8b728dde8aa683cd4c73dfefdeff89284ed437526e262e64d2d
PS C:\Users\Ivan\Desktop> docker images
REPOSITORY              TAG           IMAGE ID        CREATED          SIZE
static_web              latest        7c80183e0682    9 minutes ago    169MB
ivkeex/apache2          latest        1ee3388a784e    12 minutes ago   205MB
ivKeeX/static_web       v1            19c887b55874    12 hours ago     169MB
apache2                 webserver     11067ca7fc51    12 hours ago     245MB
apache2                 latest        3f7d0c228e8e    12 hours ago     245MB
ubuntu                  latest        a04dc4851cbc    6 weeks ago      78.1MB
```