



Creating Docker file using 'ONBUILD' instruction.



Step 1: Create a dockerfile on with 'ONBUILD' instruction and nginx webserver image.

```
FROM docker.io/nginx
ONBUILD COPY index.html /usr/share/nginx/html/
CMD ["nginx", "-g", "daemon off;"]
```

```
~
~
~
~
~
~
~
```

Step 2: Create an index.html file

```
controlplane $ echo " hello from swapnil " > index.html
controlplane $ cat index.html
hello from swapnil
controlplane $
```

Step 3: Build an image from dockerfile.

```
controlplane $ docker build -t nginx-web .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

ERRO[0000] Can't add file /root/.gnupg/S.gpg-agent to tar: archive/tar: sockets not supported
ERRO[0000] Can't add file /root/.gnupg/S.gpg-agent.browser to tar: archive/tar: sockets not supported
ERRO[0000] Can't add file /root/.gnupg/S.gpg-agent.extra to tar: archive/tar: sockets not supported
ERRO[0000] Can't add file /root/.gnupg/S.gpg-agent.ssh to tar: archive/tar: sockets not supported
Sending build context to Docker daemon 3.652MB
Step 1/3 : FROM docker.io/nginx
latest: Pulling from library/nginx
f11c1adaa26e: Pull complete
c6b156574604: Pull complete
ea5d7144c337: Pull complete
1bbcb9df2c93: Pull complete
537a6cfe3404: Pull complete
767bff2cc03e: Pull complete
adc73cb74f25: Pull complete
Digest: sha256:67682bda769fae1ccf5183192b8daf37b64cae99c6c3302650f6f8bf5f0f95df
```

Step 4: Check the images

```
controlplane $ docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
nginx-web     latest    e382a1e50329   27 seconds ago 188MB
nginx         latest    fffffc90d343   3 weeks ago   188MB
controlplane $
```

Step 5: Save the images in zip format and send to node01 machine.

```
controlplane $ docker save nginx-web -o nginx-web.tar
controlplane $ scp nginx-web.tar node01:/root/
nginx-web.tar                                100% 183MB 173.6MB/s   00:01
controlplane $ scp index.html node01:/root/
index.html                                  100%  21    44.7KB/s   00:00
controlplane $
```

Step 6: Take ssh and unzip the image file on node01.

```
controlplane $ ssh node01
Last login: Sun Jul 14 10:38:40 2024 from 10.244.6.135
node01 $ docker load -i nginx-web.tar
32148f9f6c5a: Loading layer 77.83MB/77.83MB
32cfaf91376f: Loading layer 113.9MB/113.9MB
933a3ce2c78a: Loading layer 3.584kB/3.584kB
7190c87a0e8a: Loading layer 4.608kB/4.608kB
92d0d4e97019: Loading layer 2.56kB/2.56kB
0c6c257920c8: Loading layer 5.12kB/5.12kB
56b6d3be75f9: Loading layer 7.168kB/7.168kB
Loaded image: nginx-web:latest
node01 $
```

Step 7: Create a dockerfile using the previse image.

```
FROM nginx-web
```

Step 8: Build an image.

```
node01 $ docker build -t my-web-page .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 191.8MB
Step 1/1 : FROM nginx-web
# Executing 1 build trigger
--> 9925475a5e34
Successfully built 9925475a5e34
Successfully tagged my-web-page:latest
node01 $
```

Step 9: Run the container on port 20050

```
node01 $ docker run -d -p 20050:80 my-web-page
20aa4a124e351ef03433462f0824d58b1ff8dfdb94685c7391b6c34e70718c1
node01 $ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS
                NAMES
20aa4a124e35   my-web-page    "/docker-entrypoint...." 5 seconds ago  Up 4 seconds  0.0.0.0
:20050->80/tcp, :::20050->80/tcp   interesting_goldstine
node01 $
```

Step 10: Access the container

Host 1

Common Ports

80

8080

Custom Ports

1234

Access

Host 2

Common Ports

80

8080

Custom Ports

20050

Access

Check the result

