

03:56:32

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.8 OPEN PORT: 80

Memory: 2.68% (107.1MB / 3.906GB) CPU: 0.27%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
#####
[node1] (local) root@192.168.0.8 ~
$ docker run -dp 80:80 docker/getting-started:pwd
Unable to find image 'docker/getting-started:pwd' locally
pwd: Pulling from docker/getting-started
89d9c30c1d48: Pull complete
24f1e4f0b2f4: Pull complete
16542569a10d: Pull complete
08396939143d: Pull complete
Digest: sha256:9156d395e7e41498d5340e95513d61fc7929db72039348306c5d7263d7f2696
Status: Downloaded newer image for docker/getting-started:pwd
e22c7446a91c28d067c8e96bb51a5921a09377df7b0690349631a9c714b458
[node1] (local) root@192.168.0.8 ~
$ 
```

34°C Smoke

Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/our-application/

Docker Labs Our Application

Tutorial ^

- Getting Started
- Our Application**
- Updating our App
- Sharing our App
- Persisting our DB
- Using Bind Mounts
- Multi-Container Apps
- Using Docker Compose
- Image Building Best Practices
- What Next?

PWD Tips

Getting our App into PWD

Before we can run the application, we need to get the application source code into the Play with Docker environment. For real projects, you can clone the repo. But, in this case, you will upload a ZIP archive.

1. Download the zip and upload it to Play with Docker. As a tip, you can drag and drop the zip (or any other file) on to the terminal in PWD.
2. In the PWD terminal, extract the zip file.

```
unzip app.zip
```

3. Change your current working directory into the new 'app' folder.

```
cd app/
```

4. In this directory, you should see a simple Node-based application.

```
ls
package.json  spec          src           yarn.lock
```

Table of contents

- Getting our App into PWD
- Building the App's Container Image
- Starting an App Container
- Recap

03:55:16

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

clat16ef_clat17mfm18g009gehs0

IP: 192.168.0.8 OPEN PORT: 80

Memory: 2.67% (106.9MB / 3.906GiB) CPU: 0.80%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
Unable to find image 'docker/getting-started:pwd' locally
pwd: Pulling from docker/getting-started
89d9c930c1dd48: Pull complete
24f1c4f0b2f4: Pull complete
16542569a10d: Pull complete
08396939143d: Pull complete
Digest: sha256:9156d395e7e41498d5348e95513d61fc7929db720393448306c5d7263d7f2696
Status: Downloaded newer image for docker/getting-started:pwd
e22c7446a9alc28d0e7c8e96bb051a5921a09377df7b0690349631a9c714b458
[node1] (local) root@192.168.0.8 ~
$ pwd
/root
[node1] (local) root@192.168.0.8 ~
$
```

03:52:24

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

clat16ef_clat17mfm18g009gehs0

IP: 192.168.0.8 OPEN PORT: 80

Memory: 2.69% (107.4MiB / 3.906GiB) CPU: 0.26%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
Uploading file(s) 1/1 : app.zip
Unable to find image 'docker/getting-started:pwd' locally
pwd: Pulling from docker/getting-started
89d9c930c1dd48: Pull complete
24f1c4f0b2f4: Pull complete
16542569a10d: Pull complete
08396939143d: Pull complete
Digest: sha256:9156d395e7e41498d5348e95513d61fc7929db720393448306c5d7263d7f2696
Status: Downloaded newer image for docker/getting-started:pwd
e22c7446a9alc28d0e7c8e96bb051a5921a09377df7b0690349631a9c714b458
[node1] (local) root@192.168.0.8 ~
$ pwd
/root
[node1] (local) root@192.168.0.8 ~
$
```

Editor - Google Chrome

labs.play-with-docker.com/sessions/clat16efml8g009gehr0/instances/clat16ef_clat17mfm18g009gehs0

Create or upload files in the session terminal and then refresh

C

/root

app.zip

PORT 80

CPU 0.16%

gehr0@direct.labs.play-w

```
Unable to find image 'docker/getting-started:pwd' locally
pwd: Pulling from docker/getting-started
89d9c930c1dd48: Pull complete
24f1c4f0b2f4: Pull complete
16542569a10d: Pull complete
08396939143d: Pull complete
Digest: sha256:9156d395e7e41498d5348e95513d61fc7929db720393448306c5d7263d7f2696
Status: Downloaded newer image for docker/getting-started:pwd
e22c7446a9alc28d067c8e96bb051a5921a09377df7b0690349631a9c714b458
[node1] (local) root@192.168.0.8 ~
$ pwd
/root
[node1] (local) root@192.168.0.8 ~
$ 
```

34°C Smoke Search ENG IN 13:57 16-11-2023

labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clat17mfm18g009gehs0

03:50:41

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8 node1

IP 192.168.0.8 OPEN PORT 80

Memory 2.81% (112.3MiB / 3.906GiB) CPU 0.15%

SSH ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
Digest: sha256:9156d395e7e41498d5348e95513d61fc7929db720393448306c5d7263d7f2696
Status: Downloaded newer image for docker/getting-started:pwd
e22c7446a9alc28d067c8e96bb051a5921a09377df7b0690349631a9c714b458
[node1] (local) root@192.168.0.8 ~
$ pwd
/root
[node1] (local) root@192.168.0.8 ~
$ unzip app.zip
Archive: app.zip
  creating: app/
    inflating: app/package.json
    inflating: app/varn.lock
    creating: app/src/
    creating: app/src/routes/

```

34°C Smoke Search ENG IN 13:58 16-11-2023

The screenshot shows a web-based terminal interface from labs.play-with-docker.com. The session title is "clat16ef_clat17mfm18g009gehs0".

Session Overview:

- IP:** 192.168.0.8
- Memory:** 2.81% (112.4MB / 3.906GB)
- CPU:** 0.38%
- SSH:** ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

Actions:

- CLOSE SESSION**
- OPEN PORT** (selected, port 80)
- DELETE**
- EDITOR**

Terminal Output:

```
inflating: app/src/static/css/font-awesome/fa-regular-400.woff2
inflating: app/src/static/css/font-awesome/fa-regular-400.ttf
inflating: app/src/static/css/bootstrap.min.css
inflating: app/src/static/css/styles.css
creating: app/spec/
creating: app/spec/routes/
inflating: app/spec/routes/addItem.spec.js
inflating: app/spec/routes/updateItem.spec.js
inflating: app/spec/routes/deleteItem.spec.js
inflating: app/spec/routes/getItems.spec.js
creating: app/spec/persistence/
inflating: app/spec/persistence/sqlite.spec.js
[node1] (local) root@192.168.0.8 ~
$
```

File Explorer:

- /root
- app
- app.zip

Session Terminal:

```
PORT 80
CPU 0.18%
gehr0@direct.labs.play-w
```

System Status:

- 34°C Smoke
- Search bar
- Taskbar icons
- 13:59 16-11-2023

The screenshot shows a Docker session interface. At the top, there's a header with a timestamp (03:48:47), a close session button, and a URL (labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clat17mfml8g009gehs0). Below the header, there's a control bar with 'CLOSE SESSION' (orange), 'OPEN PORT' (button), '80' (selected), 'Memory' (2.81% / 112.5MB / 3.906GB), 'CPU' (0.18%), and an 'SSH' field containing 'ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w'. There are 'DELETE' and 'EDITOR' buttons. The main area shows a terminal window with the following output:

```
inflating: app/spec/routes/deleteItem.spec.js
inflating: app/spec/routes/getItems.spec.js
creating: app/spec/persistence/
inflating: app/spec/persistence/sqlite.spec.js
[node1] (local) root@192.168.0.8 ~
$ cd app/
[node1] (local) root@192.168.0.8 ~/app
$ pwd
/root/app
[node1] (local) root@192.168.0.8 ~/app
$ ls
package.json  spec      src      yarn.lock
[node1] (local) root@192.168.0.8 ~/app
$
```

The screenshot shows a browser window displaying a Docker tutorial page. The URL is Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/our-application/. The page has a header with the dockerLabs logo and 'Our Application'. On the left, there's a sidebar with 'Docker 101' sections: Tutorial (Getting Started, Our Application, Updating our App, Sharing our App, Persisting our DB, Using Bind Mounts, Multi-Container Apps, Using Docker Compose, Image Building Best Practices, What Next?), PWD Tips, and a 'Table of contents' section with links to Getting our App into PWD, Building the App's Container Image, Starting an App Container, and Recap. The main content area shows steps for creating a Dockerfile and building a container image. It includes code snippets and explanatory text.

1. Create a file named Dockerfile with the following contents.

```
FROM node:10-alpine
WORKDIR /app
COPY . .
RUN yarn install --production
CMD ["node", "/app/src/index.js"]
```

2. Build the container image using the `docker build` command.

```
docker build -t docker-101 .
```

This command used the Dockerfile to build a new container image. You might have noticed that a lot of "layers" were downloaded. This is because we instructed the builder that we wanted to start from the `node:10-alpine` image. But, since we didn't have that on our machine, that image needed to be downloaded.

After that, we copied in our application and used `yarn` to install our application's dependencies. The `CMD` directive specifies the default command to run when starting a container from this image.

The image displays two screenshots of a web-based Docker instance management interface, likely from labs.play-with-docker.com.

Session 1 (Top):

- Terminal Output:**

```
[node] (local) root@192.168.0.8 ~/app
$ pwd
/root/app
[node] (local) root@192.168.0.8 ~/app
$ ls
package.json  spec      src          yarn.lock
[node] (local) root@192.168.0.8 ~/app
$ vim Dockerfile
[node] (local) root@192.168.0.8 ~/app
$ cat Dockerfile
FROM node:10-alpine
WORKDIR /app
COPY . .
RUN yarn install --production
```

Session 2 (Bottom):

- Terminal Output:**

```
COPY . .
RUN yarn install --production
CMD ["node", "/app/src/index.js"]
[node] (local) root@192.168.0.8 ~/app
$ docker build -t docker-101 .
[+] Building 25.9s (9/9) FINISHED
  => [internal] load build definition from Dockerfile
  => transferring dockerfile: 143B
  => [internal] load .dockerignore
  => [internal] load context: 2B
  => [internal] load metadata for docker.io/library/node:10-alpine
  => [1/4] FROM docker.io/library/node:10-alpine@sha256:c98dac24efd4254f75976c40bce46944697a110d06ce7
  => resolve docker.io/library/node:10-alpine@sha256:c98dac24efd4254f75976c40bce46944697a110d06ce7
  => sha256:ddad3d7cle96adf9153f8921a7c9790f880a390163df453be1566e9ef0d546e0 2.82MB / 2.82MB
```

The screenshot shows a Docker session interface with a terminal window displaying a log of a Docker build process. The log output is as follows:

```

--> => extracting sha256:de915e575d22c7e33c83fdaf7aee0672e5d6a67e596a26fe0b30c7022f53cd 4.5s
--> => extracting sha256:7150aa69525b95f82b3df6a61a002f02382b2f3ea8ce51b9000b965f7476a5cc 0.1s
--> => extracting sha256:d7aa47be044e5a988e3e7f204e2e28cb9f070daa32ed081072ad6d5bf6c085d1 0.0s
--> [internal] load build context 0.2s
--> => transferring context: 4.64MB 0.1s
[2/4] WORKDIR /app 0.0s
[3/4] COPY . . 0.1s
[4/4] RUN yarn install --production 16.6s
--> => exporting layers 3.0s
--> => writing image sha256:8164f35bfea4d0c0c71861375d76199869d110401e8alc02370eaa526c574af 3.0s
--> => naming to docker.io/library/docker-101 0.0s
[node1] (local) root@192.168.0.8 ~/app 0.0s
$ 

```

The screenshot shows a web browser displaying a Docker tutorial page from dockerLabs. The page title is "Our Application". The left sidebar contains a navigation menu for "Docker 101" with sections like "Tutorial", "Getting Started", "Our Application" (which is currently selected), "Updating our App", etc. The main content area is titled "Starting an App Container". It includes instructions for running the application using the `docker run` command:

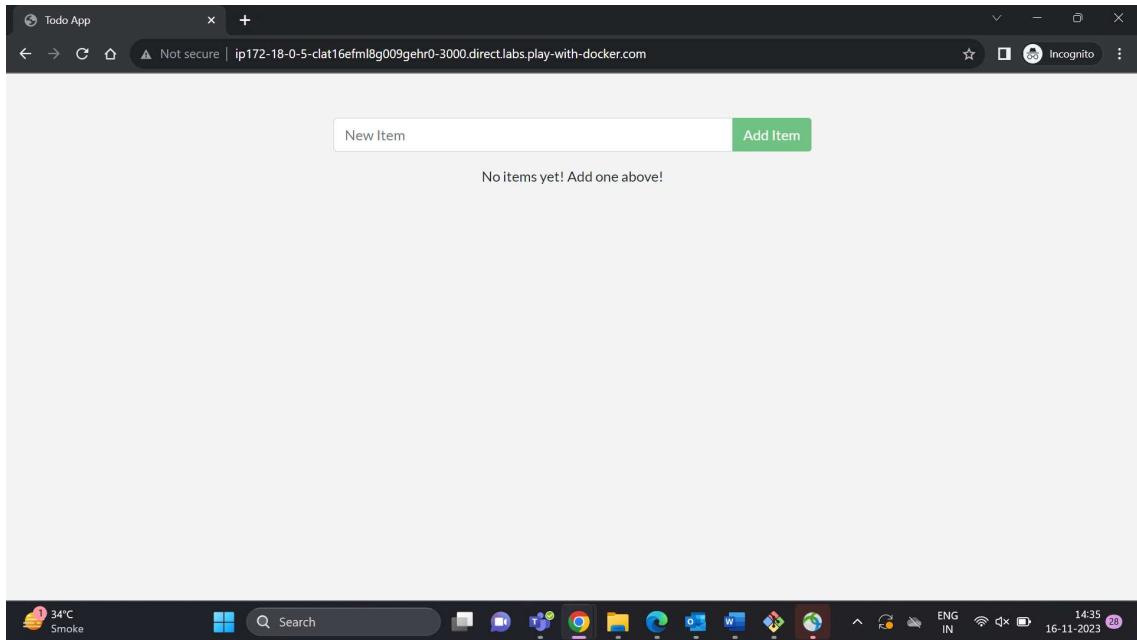
1. Start your container using the `docker run` command:

```
docker run -dp 3000:3000 docker-101
```
2. Open the application by clicking on the "3000" badge at the top of the PWD interface. Once open, you should have an empty todo list!

Below the instructions is a screenshot of a "New Item" input field with the placeholder "No items yet! Add one above!".

The screenshot shows a Docker session interface with a terminal window displaying the following command output:

```
=> naming to docker.io/library/docker-101
[node1] (local) root@192.168.0.8 ~app
$ docker run -dp 3000:3000 docker-101
0829f0af05f41031f15765620076d82c1f1f2b018ef1cb6ebcb417d41d10129cc
[node1] (local) root@192.168.0.8 ~app
$ docker ps
CONTAINER ID IMAGE NAMES COMMAND CREATED STATUS PORTS
0829f0af05f4 docker-101 "docker-entrypoint.s..." 14 seconds ago Up 12 seconds 0.0.0.
0:3000->3000/tcp flamboyant_ptolemy
e22c7446a9a1 docker/getting-started:pwd "nginx -g 'daemon of..." 23 minutes ago Up 23 minutes 0.0.0.
0:80->80/tcp nice_mccarthy
[node1] (local) root@192.168.0.8 ~app
$
```



The image shows a screenshot of a Windows desktop environment with three windows open:

- Top Window:** A web browser window titled "Todo App" showing a simple todo list with two items: "Chocolates" and "Clothes".
- Middle Window:** An integrated terminal and file explorer window titled "Editor - Google Chrome". It displays the file structure of a React application under "/root/app" and the content of the "app.js" file. The "app.js" code is as follows:

```
43 item => {
44     const index = items.findIndex(i => i.id === item.id);
45     setItems([...items.slice(0, index), ...items.slice(index + 1)]);
46 },
47 [items],
48 );
49
50 if (items === null) return 'Loading...';
51
52 return (
53     <React.Fragment>
54         <AddItemForm onNewItem={onNewItem} />
55         {items.length === 0 && (
56             <p className="text-center">You have no todo items yet! Add one above!</p>
57         )}
58         {items.map(item => (
59             <ItemDisplay
60                 item={item}
61                 key={item.id}
62                 onItemUpdate={onItemUpdate}
63                 onItemRemoval={onItemRemoval}
64             />
65         ))}
66     </React.Fragment>
67 );
68 }
69
70 function AddItemForm({ onNewItem }) {
71     const { Form, InputGroup, Button } = ReactBootstrap;
72
73     const [newItem, setNewItem] = React.useState('');
74     const [submitting, setSubmitting] = React.useState(false);
75
76     const submitNewItem = e => {
77         e.preventDefault();
78         setSubmitting(true);
```

- Bottom Window:** A standard Windows taskbar at the bottom of the screen.

The screenshot shows a web browser window with a blue header bar. The address bar displays the URL: Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/updating-our-app/. The main content area is titled "Updating our Source Code". On the left, there's a sidebar with "Docker 101" navigation links. The main content includes numbered steps, code snippets, and terminal logs. A sidebar on the right contains a "Table of contents" with links to "Updating our Source Code", "Replacing our Old Container", and "Recap". The bottom of the screen shows a Windows taskbar with various icons and system status.

The screenshot shows a web browser window with a blue header bar. The address bar displays the URL: labs.play-with-docker.com/p/clat16efml8g009gehr0@clat16ef_clat17mfml8g009gehs0. The main content area shows a session interface for "clat16ef_clat17mfml8g009gehs0". It displays session details like IP (192.168.0.8), ports (3000, 80), memory usage (7.82%), and CPU usage (0.93%). Below this, there's an SSH terminal window showing a Docker build log and a command-line session. The bottom of the screen shows a Windows taskbar with various icons and system status.

The screenshot shows a web browser window with a blue header bar. The URL is `Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/updating-our-app/`. The main content area has a dark background with white text. On the left, there's a sidebar with a navigation menu under "Docker 101". The main content is titled "Replacing our Old Container". It contains numbered steps with terminal command examples:

1. Get the ID of the container by using the `docker ps` command.
2. Use the `docker stop` command to stop the container.
3. Once the container has stopped, you can remove it by using the `docker rm` command.
4. Now, start your updated app.
5. Open the app and you should see your updated help text!

At the bottom of the content area, there's a terminal window showing the command `docker run -dp 3000:3000 docker-101`.

The screenshot shows a web browser window with a dark header bar. The URL is `labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clat17mfml8g009gehs0`. The main content area displays a session interface for a Docker instance named `clat16ef_clat17mfml8g009gehs0`. It shows basic resource usage statistics:

IP	Memory	CPU
192.168.0.8	5.22% (208.8MiB / 3.906GiB)	0.12%

Below the stats, there's an SSH terminal window showing the command `ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w`. At the bottom of the interface, there's a terminal window showing the output of the `docker ps` command:

```
already allocated.
[nodel] (local) root@192.168.0.8 ~/app
$ docker ps
CONTAINER ID IMAGE NAMES COMMAND CREATED STATUS
PORTS
0829f0af05f4 8164f35bfea4 "docker-entrypoint.s..." 40 minutes ago Up 40 minutes
0.0.0.0:3000->3000/tcp flamboyant_ptolemy
e22c7446a9a1 docker/getting-started:pwd "nginx -g 'daemon of..." About an hour ago Up About an hour
0.0.0.0:80->80/tcp nice_mccarthy
[nodel] (local) root@192.168.0.8 ~/app
$ docker stop 082
082
[nodel] (local) root@192.168.0.8 ~/app
$
```

02:53:13

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.8 OPEN PORT: 80

Memory: 4.82% (192.9MB / 3.906GB) CPU: 0.15%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
already allocated.
[node1] (local) root@192.168.0.8 ~/app
$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS
PORTS NAMES
0829f0af05f4 8164f35bfea4 "docker-entrypoint.s..." 40 minutes ago Up 40 minutes
0.0.0.0:3000->3000/tcp flamboyant_ptolemy
e22c7446a9a1 docker/getting-started:pwd "nginx -g 'daemon of..." About an hour ago Up About an hour
0.0.0.0:80->80/tcp nice_mccarthy
[node1] (local) root@192.168.0.8 ~/app
$ docker stop 082
082
[node1] (local) root@192.168.0.8 ~/app
$
```

02:51:15

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

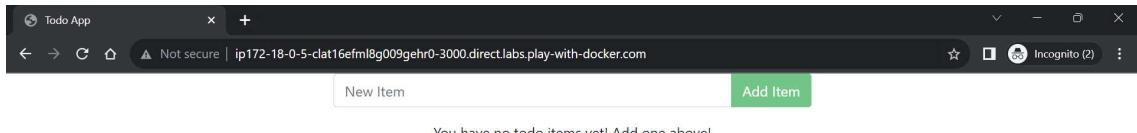
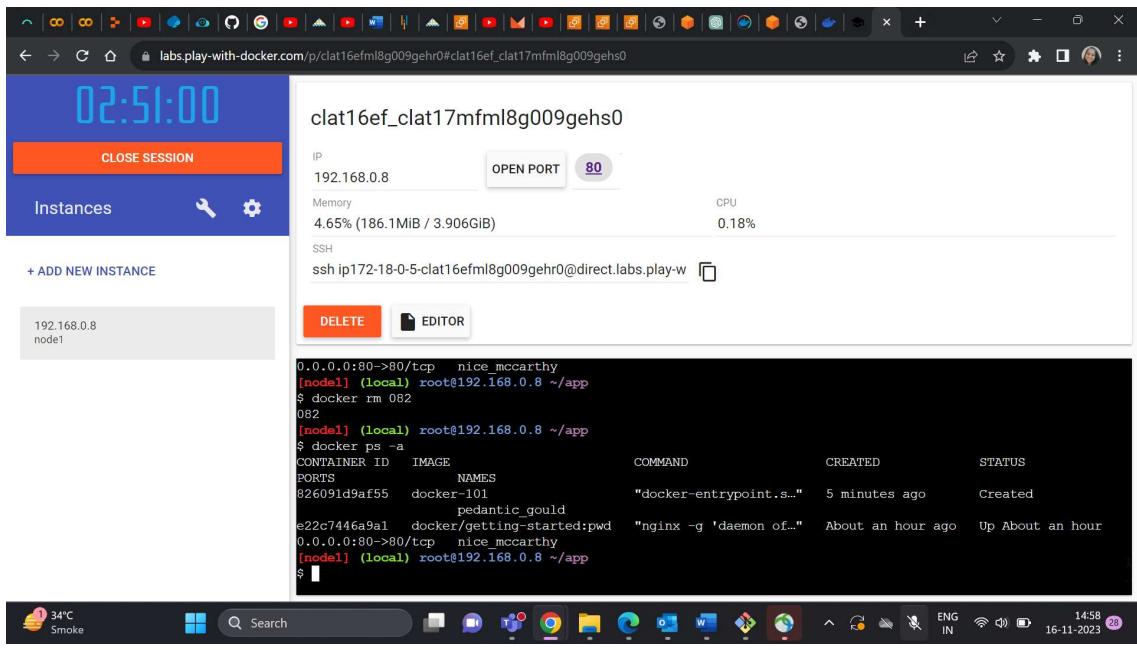
IP: 192.168.0.8 OPEN PORT: 80

Memory: 4.65% (186.1MiB / 3.906GiB) CPU: 0.21%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
(node1) (local) root@192.168.0.8 ~/app
$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS
PORTS NAMES
e22c7446a9a1 docker/getting-started:pwd "nginx -g 'daemon of..." About an hour ago Up About an hour
0.0.0.0:80->80/tcp nice_mccarthy
[node1] (local) root@192.168.0.8 ~/app
$ docker rm 082
082
(node1) (local) root@192.168.0.8 ~/app
$ docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS
PORTS NAMES
826091d9af55 docker-101 "docker-entrypoint.s..." 5 minutes ago Created
```



The screenshot shows a web browser window with a blue header bar. The address bar reads "Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/sharing-our-app/". The main content area has a dark background with white text. On the left, there's a sidebar titled "Docker 101" containing links like "Tutorial", "Getting Started", "Our Application", etc. The main content area starts with "To push an image, we first need to create a repo on Docker Hub." It then lists four steps: 1. Go to Docker Hub and log in if you need to. 2. Click the Create Repository button. 3. For the repo name, use `101-todo-app`. Make sure the Visibility is `Public`. 4. Click the Create button! Below these steps, it says "If you look on the right-side of the page, you'll see a section named **Docker commands**. This gives an example command that you will need to run to push to this repo." To the right of the main content, there's a "Table of contents" sidebar with links to "Create a Repo", "Pushing our Image", "Running our Image on a New Instance", and "Recap". A "Docker commands" box is centered on the page, containing the command `docker push dockersamples/101-todo-app:tagname`.

The screenshot shows a web browser window with a dark theme. The address bar reads "hub.docker.com/repository/docker/ruchikamoon15/101-todo-app/general". The main content area shows a "General" tab selected. It displays the repository details: "ruchikamoon15 / 101-todo-app". Under the "Description" section, it says "This repository does not have a description". Below that, it says "Last pushed: a few seconds ago". To the right, there's a "Docker commands" box with the command `docker push ruchikamoon15/101-todo-app:tagname`. At the bottom of the page, there are sections for "Tags" (empty) and "Automated Builds" (available with Pro, Team and Business subscriptions). The browser status bar at the bottom shows "15:07 16-11-2023".

The screenshot shows a web browser window with a blue header bar. The address bar displays the URL: Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/sharing-our-app/. The main content area is titled "Pushing our Image". On the left, there's a sidebar with "Docker 101" navigation links. On the right, there's a "Table of contents" sidebar with links like "Create a Repo", "Pushing our Image", etc. The central content area contains numbered steps with terminal command examples.

Pushing our Image

1. Back in your PWD instance, try running the command. You should get an error that looks something like this:

```
$ docker push dockersamples/101-todo-app
The push refers to repository [docker.io/dockersamples/101-todo-app]
An image does not exist locally with the tag: dockersamples/101-todo-app
```

Why did it fail? The push command was looking for an image named dockersamples/101-todo-app, but didn't find one. If you run `docker image ls`, you won't see one either.

To fix this, we need to "tag" our image, which basically means give it another name.

2. Login to the Docker Hub using the command `docker login -u YOUR-USER-NAME`.

3. Use the `docker tag` command to give the `docker-101` image a new name. Be sure to swap out `YOUR-USER-NAME` with your Docker ID.

```
docker tag docker-101 YOUR-USER-NAME/101-todo-app
```

4. Now try your push command again. If you're copying the value from Docker Hub, you can drop the `tagname` portion, as we didn't add a tag to the image name.

The screenshot shows a web browser window with a dark-themed interface. The top bar includes a search bar and a toolbar with various icons. The main content area displays a session management interface with a clock showing 02:33:24. It lists an instance named "clat16ef_clat17mfml8g009gehs0" with details like IP (192.168.0.8), ports (3000, 80), memory usage (4.88% / 195.4MiB / 3.906GiB), and CPU usage (0.17%). Below this, there's an SSH terminal window showing a successful Docker push operation and login attempt.

02:33:24

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 4.88% (195.4MiB / 3.906GiB) CPU: 0.17%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

```
$ docker push ruchikamoon15/101-todo-app
Using default tag: latest
The push refers to repository [docker.io/ruchikamoon15/101-todo-app]
An image does not exist locally with the tag: ruchikamoon15/101-todo-app
[node1] (local) root@192.168.0.8 ~/app
$ docker login -u ruchikamoon15
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
[node1] (local) root@192.168.0.8 ~/app
$
```

02:30:28

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 8.06% (322.2MB / 3.906GB) CPU: 0.45%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
5970ac15404cb3170837fe26f26ca05f450a364125d71bd039c443f04c05ee39
[node1] (local) root@192.168.0.8 ~/app
$ docker push ruchikamoon15/101-todo-app
Using default tag: latest
The push refers to repository [docker.io/ruchikamoon15/101-todo-app]
An image does not exist locally with the tag: ruchikamoon15/101-todo-app
[node1] (local) root@192.168.0.8 ~/app
$ docker login -u ruchikamoon15
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
```

02:30:10

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 8.06% (322.2MB / 3.906GB) CPU: 0.46%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
Using default tag: latest
The push refers to repository [docker.io/ruchikamoon15/101-todo-app]
An image does not exist locally with the tag: ruchikamoon15/101-todo-app
[node1] (local) root@192.168.0.8 ~/app
$ docker login -u ruchikamoon15
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
[node1] (local) root@192.168.0.8 ~/app
$ docker tag docker-101 ruchikamoon15/101-todo-app
[node1] (local) root@192.168.0.8 ~/app
```

02:29:59

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 8.06% (322.3MiB / 3.906GiB) CPU: 0.23%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
Login Succeeded
[node1] (local) root@192.168.0.8 ~ /app
$ docker tag docker-101 ruchikamoon15/101-todo-app
[node1] (local) root@192.168.0.8 ~ /app
$ docker push ruchikamoon15/101-todo-app
Using default tag: latest
The push refers to repository [docker.io/ruchikamoon15/101-todo-app]
0f58267bbc6a: Pushed
4fd9017cb8bb: Pushed
453f7937ee0b: Pushed
edff9ff691d5: Mounted from library/node
cbe4b9146f86: Mounted from library/node
a6524c5b12a6: Mounted from library/node
9a5d14f9f550: Mounted from library/node
```

36°C Smoke Search ENG IN 15:19 16-11-2023

02:29:51

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 8.06% (322.3MiB / 3.906GiB) CPU: 0.40%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
(node1) (local) root@192.168.0.8 ~ /app
$ docker push ruchikamoon15/101-todo-app
Using default tag: latest
The push refers to repository [docker.io/ruchikamoon15/101-todo-app]
0f58267bbc6a: Pushed
4fd9017cb8bb: Pushed
453f7937ee0b: Pushed
edff9ff691d5: Mounted from library/node
cbe4b9146f86: Mounted from library/node
a6524c5b12a6: Mounted from library/node
9a5d14f9f550: Mounted from library/node
latest: digest: sha256:6b574495840bdccaa9db6e49edd9a13a56b363a4a8112e56a474059ff8f9c4f size: 1787
[node1] (local) root@192.168.0.8 ~ /app
$
```

36°C Smoke Search ENG IN 15:19 16-11-2023

The screenshot shows a web browser window with the URL [Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/sharing-our-app/](http://ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/sharing-our-app/). The page title is "Sharing our App". On the left, there's a sidebar with "Docker 101" navigation, including "Tutorial", "Getting Started", "Our Application", "Updating our App", "Sharing our App", "Persisting our DB", "Using Bind Mounts", "Multi-Container Apps", "Using Docker Compose", "Image Building Best Practices", "What Next?", and "PWD Tips". The main content area has a heading "Running our Image on a New Instance". It includes instructions: "1. Back in PWD, click on Add New Instance to create a new instance.", "2. In the new instance, start your freshly pushed app.", and "3. Click on the 3000 badge when it comes up and you should see the app with your modifications! Hooray!". Below these instructions is a terminal window showing the command `docker run -dp 3000:3000 YOUR-USER-NAME/101-todo-app`. A note says "You should see the image get pulled down and eventually start up!". To the right is a "Table of contents" sidebar with links to "Create a Repo", "Pushing our Image", "Running our Image on a New Instance", and "Recap". At the bottom right of the browser window, there's a status bar with icons for battery, signal, and time (15:20, 16-11-2023).

The screenshot shows a web browser window with the URL [Not secure | labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clauc1ggftqg00bi6sq0](http://labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clauc1ggftqg00bi6sq0). The page displays a session titled "02:27:02" with a "CLOSE SESSION" button. It shows an "Instances" list with two entries: "192.168.0.8 node1" and "192.168.0.7 node2". The "node2" entry is highlighted. On the right, there's a detailed view for "clat16ef_clauc1ggftqg00bi6sq0" with fields for IP (192.168.0.7), OPEN PORT (3000), Memory (8.12% / 3.906GiB), and CPU (0.45%). Below this is an SSH terminal window showing a root shell on node2. The terminal output shows the command `ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-with-docker.com` being run, followed by a log of a Docker pull operation for the "ruchikamoon15/101-todo-app" image. The status message indicates that a newer image was downloaded. The browser status bar at the bottom right shows "15:22, 16-11-2023".

The screenshot shows a web browser window with the URL [Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/persisting-our-data/](http://ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/persisting-our-data/). The page title is "Persisting our DB". The left sidebar contains a navigation menu for "Docker 101" with sections like Tutorial, Getting Started, Our Application, Updating our App, Sharing our App, Persisting our DB, Using Bind Mounts, Multi-Container Apps, Using Docker Compose, Image Building Best Practices, and What Next?. The main content area is titled "Seeing this in Practice" and describes starting two containers to create files. It includes a command example:

```
run -d ubuntu bash -c "shuf -i 1-10000 -n 1 -o /data.txt && tail -f /dev/null"
```

It also mentions validating the output by exec-ing into the container.

The right sidebar has a "Table of contents" section with links to The Container's Filesystem, Seeing this in Practice, Container Volumes, Persisting our Todo Data, Diving into our Volume, and Recap.

The screenshot shows a web browser window with the URL labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clauc1ggftqg00bi6sq0. The interface displays a session titled "clat16ef_clauc1ggftqg00bi6sq0" with the IP address 192.168.0.7 and port 3000. It shows memory usage (10.49% / 419.6MB / 3.906GB) and CPU usage (0.51%). An SSH terminal window is open, showing the following session log:

```
9bd357ff942e4: Pull complete
Digest: sha256:6b574495840bddcaad9db6e49edd9a13a56b363a4a8112e56a47405ff8f9c4f
Status: Downloaded newer image for ruchikamoon15/101-todo-app:latest
66a86c055c2d5ed4d967eb37d3423b3f395df40a4f1d90e5802306bd39bfbe2f
[node2] (local) root@192.168.0.7 ~
$ docker run -d ubuntu bash -c "shuf -i 1-10000 -n 1 -o /data.txt && tail -f /dev/null"
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
aecd8493d397: Pull complete
Digest: sha256:2b7412e6465c3c7fc5bb21d3e6f1917c167358449fecac8176c6e496e5clf05f
Status: Downloaded newer image for ubuntu:latest
3fd348061ab8603187398ef9dc66b382b182e486a9b940f83befad1af701f269
[node2] (local) root@192.168.0.7 ~
$
```

02:19:40

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.7
node2

IP: 192.168.0.7 | OPEN PORT: 3000 | CPU: 0.50% | Memory: 10.10% (403.9MB / 3.906GB)

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-1

DELETE EDITOR

```
66a86c055c2d5ed4d967eb37d3423b3f395df40a4fld90e5802306bd39bfbe2f
[node2] (local) root@192.168.0.7 ~
$ docker run -it ubuntu bash "shuf -i 1-10000 -n 1 -o /data.txt && tail -f /dev/null"
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
aece8493d397: Pull complete
Digest: sha256:2b7412e6465c3c7fc5bb21d3e6f1917c167358449fecac8176c6e496e5c1f05f
Status: Downloaded newer image for ubuntu:latest
3fd348061ab8603187398ef9c66b382b182e48a9b940f83befadlauf701f269
[node2] (local) root@192.168.0.7 ~
$ docker exec 3fd cat /data.txt
9003
[node2] (local) root@192.168.0.7 ~
$ docker run -it ubuntu ls
```

02:19:04

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

IP: 192.168.0.7 | OPEN PORT: 3000 | CPU: 1.01% | Memory: 10.12% (404.9MB / 3.906GB)

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-1

DELETE EDITOR

```
latest: Pulling from library/ubuntu
aece8493d397: Pull complete
Digest: sha256:2b7412e6465c3c7fc5bb21d3e6f1917c167358449fecac8176c6e496e5c1f05f
Status: Downloaded newer image for ubuntu:latest
3fd348061ab8603187398ef9c66b382b182e48a9b940f83befadlauf701f269
[node2] (local) root@192.168.0.7 ~
$ docker exec 3fd cat /data.txt
9003
[node2] (local) root@192.168.0.7 ~
$ docker run -it ubuntu ls /
bin dev home lib32 libx32 mnt proc run srv tmp var
boot etc lib lib64 media opt root sbin sys usr
[node2] (local) root@192.168.0.7 ~
$
```

02:15:07

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP 192.168.0.7 OPEN PORT 3000

Memory 9.87% (394.7MB / 3.906GB) CPU 0.85%

SSH ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-1

DELETE EDITOR

```
bin dev home lib32 libx32 mnt proc run srv tmp var
boot etc lib lib64 media opt root sbin sys usr
[node2] (local) root@192.168.0.7 ~
$ docker ps
CONTAINER ID IMAGE NAMES COMMAND CREATED STATUS PORTS
3fd348061a8b ubuntu "bash -c 'shuf -i 1-..." 3 minutes ago Up 3 minutes
eloquent_mcclintock
66a86c055c2d ruchikamoon15/101-todo-app "docker-entrypoint.s..." 8 minutes ago Up 8 minutes 0.0.0.0:3000->3000/tcp boring_agnesi
[node2] (local) root@192.168.0.7 ~
$ docker rm -f 3fd
3fd
[node2] (local) root@192.168.0.7 ~
```

02:14:59

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP 192.168.0.7 OPEN PORT 3000

Memory 9.87% (394.7MB / 3.906GB) CPU 0.29%

SSH ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-1

DELETE EDITOR

```
eloquent_mcclintock
66a86c055c2d ruchikamoon15/101-todo-app "docker-entrypoint.s..." 8 minutes ago Up 8 minutes 0.0.0.0:3000->3000/tcp boring_agnesi
[node2] (local) root@192.168.0.7 ~
$ docker rm -f 3fd
3fd
[node2] (local) root@192.168.0.7 ~
$ docker ps
CONTAINER ID IMAGE NAMES COMMAND CREATED STATUS PORTS
66a86c055c2d ruchikamoon15/101-todo-app "docker-entrypoint.s..." 11 minutes ago Up 11 minutes 0.0.0.0:3000->3000/tcp boring_agnesi
[node2] (local) root@192.168.0.7 ~
$
```

A screenshot of a web browser displaying a Docker tutorial titled "Persisting our DB". The page includes a sidebar with "Docker 101" links and a main content area with steps and code snippets. A screenshot of a todo application interface is shown.

Docker 101

- Tutorial ^
- Getting Started
- Our Application
- Updating our App
- Sharing our App
- Persisting our DB
- Using Bind Mounts
- Multi-Container Apps
- Using Docker Compose
- Image Building Best Practices
- What Next?

PWD Tips

correct data is provided.

1. Create a volume by using the `docker volume create` command.
`docker volume create todo-db`
2. Start the todo container, but add the `-v` flag to specify a volume mount. We will use the named volume and mount it to `/etc/todos`, which will capture all files created at the path.
`docker run -dp 3000:3000 -v todo-db:/etc/todos docker-101`
3. Once the container starts up, open the app and add a few items to your todo list.

A screenshot of a web browser displaying a session management interface for a Docker instance. It shows details like IP, memory usage, CPU usage, and an SSH terminal.

IP: 192.168.0.7
Memory: 9.87% (394.9MiB / 3.906GiB)
CPU: 0.23%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-with-docker.com

Session details:

- Instances: 192.168.0.8 (node1), 192.168.0.7 (node2)
- DELETE EDITOR

```
(node2) (local) root@192.168.0.7 ~
$ docker rm -f 3fd
3fd
(node2) (local) root@192.168.0.7 ~
$ docker ps
CONTAINER ID IMAGE NAMES COMMAND CREATED STATUS PORTS
66a86c055c2d ruchikamoon15/101-todo-app boring_agnesi
0:3000->3000/tcp
(node2) (local) root@192.168.0.7 ~
$ docker volume create todo-db
todo-db
(node2) (local) root@192.168.0.7 ~
$
```

The screenshot shows a Linux desktop environment with a terminal window and a web browser window.

Terminal Session:

- IP:** 192.168.0.7
- OPEN PORT:** 3000
- Memory:** 6.51% (260.3MB / 3.906GB)
- CPU:** 0.35%
- SSH:** ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-with-docker.com
- Commands run:**
 - (node2) root@192.168.0.7 ~
 - \$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoonl5/101-todo-app
 - 91fffe13d2d0f765412d4571le986el0e0bb027ee72b845da16f84714af9ace12
 - docker: Error response from daemon: driver failed programming external connectivity on endpoint zealous_kirch (eb81e7ac22e9fed62939866dd69fde663df32de069a8592ld20c8e78ec04clda): Bind for 0.0.0.0:3000 failed: port is already allocated.
 - (node2) root@192.168.0.7 ~
 - \$ docker container stop 66a
 - 66a
 - (node2) root@192.168.0.7 ~
 - \$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoonl5/101-todo-app
 - 960593d8ce47783537f17cd69f22021b69679ebc0dela5d532ea431677465cd7
 - (node2) root@192.168.0.7 ~
 - \$

Browser Window:

- Title:** clat16ef_clauc1ggftqg00bi6sq0
- Content:** Todo App
- Items:**
 - New Item
 - Add Item
 - Chocolates
 - Fruits
- Address Bar:** Not secure | ip172-18-0-5-clat16efml8g009gehr0-3000.direct.labs.play-with-docker.com
- System Tray:** 36°C, Smoke, Search bar, Icons for various applications like File Explorer, Google Chrome, Microsoft Edge, etc., and system status indicators.

02:06:02

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.7 node2

IP: 192.168.0.7 OPEN PORT

Memory: 5.45% (218MiB / 3.906GiB) CPU: 8.51%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-1

DELETE EDITOR

```
docker: Error response from daemon: driver failed programming external connectivity on endpoint zealous_kirch (eb81eac22e9fed62939866dd69fde663df32de069a85921d20c8e78ec04clda): Bind for 0.0.0.0:3000 failed: port is already allocated.
[node2] (local) root@192.168.0.7 ~
$ docker container stop 66a
66a
[node2] (local) root@192.168.0.7 ~
$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoon15/101-todo-app
960593d8cecd7783537f17cd69f2021b69679ebc0de1a5d532ea431677465cd7
[node2] (local) root@192.168.0.7 ~
$ docker rm -f 960
960
[node2] (local) root@192.168.0.7 ~
$
```

36°C Smoke Search ENG IN 15:43 16-11-2023 28

02:05:32

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8 node1

192.168.0.7 node2

IP: 192.168.0.7 OPEN PORT

Memory: 5.45% (218.1MiB / 3.906GiB) CPU: 2.63%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-1

DELETE EDITOR

```
$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
[node2] (local) root@192.168.0.7 ~
$ docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
91fffe3d2d0f ruchikamoon15/101-todo-app "docker-entrypoint.s..." 3 minutes ago Created
zealous_kirch
866c3dba1684 ubuntu "ls /" 13 minutes ago Exited (0) 13 minutes ago
flamboyant_meitner
66a86c055c2d ruchikamoon15/101-todo-app "docker-entrypoint.s..." 21 minutes ago Exited (0) 3 minutes ago
boring_agnesi
[node2] (local) root@192.168.0.7 ~
$
```

36°C Smoke Search ENG IN 15:44 16-11-2023 29

02:04:41

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.7
node1

192.168.0.7
node2

IP: 192.168.0.7
OPEN PORT: 3000

Memory: 6.04% (241.5MB / 3.906GB)
CPU: 35.21%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play

DELETE **EDITOR**

```
$ docker ps -a
CONTAINER ID IMAGE NAMES COMMAND CREATED STATUS
91ffe3d2d0f ruchikamoon15/101-todo-app "docker-entrypoint.s..." 3 minutes ago Created
866c3dba1684 ubuntu zealous_kirch
ago flamboyant_meitner
66a86c055c2d ruchikamoon15/101-todo-app "docker-entrypoint.s..." 21 minutes ago Exited (0) 3 minutes ago
go boring_agnesi
[node2] (local) root@192.168.0.7 ~
$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoon15/101-todo-app
090cd166297bd0cf1490e7cee0facdf9699f6300e978d16ff0b879ee62a6fd1
[node2] (local) root@192.168.0.7 ~
$ 
```

36°C Smoke Search ENG IN 15:44 16-11-2023

02:02:01

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.7
OPEN PORT: 3000

Memory: 3.83% (153.2MiB / 3.906GiB)
CPU: 2.27%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play

DELETE **EDITOR**

```
$ docker ps -a
CONTAINER ID IMAGE NAMES COMMAND CREATED STATUS
66a86c055c2d ruchikamoon15/101-todo-app "docker-entrypoint.s..." 21 minutes ago Exited (0) 3 minutes ago
go boring_agnesi
[node2] (local) root@192.168.0.7 ~
$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoon15/101-todo-app
090cd166297bd0cf1490e7cee0facdf9699f6300e978d16ff0b879ee62a6fd1
[node2] (local) root@192.168.0.7 ~
$ docker rm -f 090
090
[node2] (local) root@192.168.0.7 ~
$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoon15/101-todo-app
341a4d52b6187c50969fb65dc0cc83585563b79ece423a738d86a1215351696
[node2] (local) root@192.168.0.7 ~
$ 
```

Top events Event brief Search ENG IN 15:47 16-11-2023

02:01:16

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.7 OPEN PORT

Memory: 3.23% (129.3MiB / 3.906GiB) CPU: 0.34%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-with-docker.com

[node2] (local) root@192.168.0.7 ~
\$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoon15/101-todo-app
\$ 09ccdb166297bd0cfc1490e7cee0fac4f9699f6300e978d16ff0b879ee62a6fd1
[node2] (local) root@192.168.0.7 ~
\$ docker rm -f 090
090
[node2] (local) root@192.168.0.7 ~
\$ docker run -dp 3000:3000 -v todo-db:/etc/todos ruchikamoon15/101-todo-app
341ad4d52b6187c50969fbef65dc0cc83585563b79ece423a738d86a1215351696
[node2] (local) root@192.168.0.7 ~
\$ docker rm -f 341
341
[node2] (local) root@192.168.0.7 ~
\$

01:59:52

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.7 OPEN PORT

Memory: 3.23% (129.4MiB / 3.906GiB) CPU: 0.32%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-with-docker.com

[node2] (local) root@192.168.0.7 ~
\$ docker volume inspect todo-db
[
 {
 "CreatedAt": "2023-11-16T10:06:04Z",
 "Driver": "local",
 "Labels": null,
 "Mountpoint": "/var/lib/docker/volumes/todo-db/_data",
 "Name": "todo-db",
 "Options": null,
 "Scope": "local"
 }
]
[node2] (local) root@192.168.0.7 ~

01:54:47

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.7 OPEN PORT

Memory: 3.18% (127.4MiB / 3.906GiB) CPU: 0.53%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-with-docker.com

[node2] (local) root@192.168.0.7 ~
\$ docker run -dp 3000:3000 \
-w /app -v \$PWD:/app \
node:10-alpine \
sh -c "yarn install && yarn run dev"
Unable to find image 'node:10-alpine' locally
10-alpine: Pulling from library/node
ddad3d/cle96: Already exists
de915e575d22: Already exists
7150aa69525b: Already exists
d7a47be044e: Already exists
Digest: sha256:dc98dac24efd4254f75976c40bce46944697a110d06ce7fa47e7268470cf2e28
Status: Downloaded newer image for node:10-alpine

01:52:56

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.7 OPEN PORT

Memory: 3.20% (127.8MiB / 3.906GiB) CPU: 0.39%

SSH: ssh ip172-18-0-95-clat16efml8g009gehr0@direct.labs.play-with-docker.com

[node2] (local) root@192.168.0.7 ~
\$ docker logs -f e91
yarn install v1.22.5
info No lockfile found.
[1/4] Resolving packages...
[2/4] Fetching packages...
[3/4] Linking dependencies...
[4/4] Building fresh packages...
success Saved lockfile.
Done in 0.08s.
yarn run v1.22.5
error Couldn't find a package.json file in "/app"
info Visit https://yarnpkg.com/en/docs/cli/run for documentation about this command.

00:55:42

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 6.00% (239.8MB / 3.906GB) CPU: 123.63%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
>3000/tcp  eager_hodgkin
e22c7446a9a1  docker/getting-started:pwd  "nginx -g 'daemon off;'"  3 hours ago  Up 3 hours  0.0.0.0:80->
80/tcp      nice_mccarthy
[node1] (local) root@192.168.0.8 ~/app
$ docker stop 597
597
[node1] (local) root@192.168.0.8 ~/app
$ docker run -dp 3000:3000 \
  -w /app -v $PWD:/app \
  node:10-alpine \
  sh -c "yarn install && yarn run dev"
618b4a14df6682d696819cb14cdf2da9f2eb56d1fdbd5ac5e734f63c09021cd0
[node1] (local) root@192.168.0.8 ~/app
$
```

35°C Smoke

Search

ENG IN 16:53 16-11-2023

00:54:27

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 11.81% (472.6MB / 3.906GB) CPU: 0.19%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
[3/4] Linking dependencies...
[4/4] Building fresh packages...
Done in 20.40s.
yarn run v1.22.5
$ nodemon src/index.js
[nodemon] 1.19.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching dir(s): ***!
[nodemon] starting  node src/index.js
Using sqlite database at /etc/todos/todo.db
Listening on port 3000
^C
[node1] (local) root@192.168.0.8 ~/app
$
```

35°C Smoke

Search

ENG IN 16:55 16-11-2023

Editor - Google Chrome
 labs.play-with-docker.com/sessions/clat16efml8g009gehr0/instances/clat16ef_clat17mfml8g009gehs0/editor

Create or upload files in the session terminal and then refresh

app.js

Save Reload

```

 94      <InputGroup className="mb-3">
 95        <Form.Control
 96          value={newItem}
 97          onChange={(e) => setNewItem(e.target.value)}
 98          type="text"
 99          placeholder="New item"
100         aria-describedby="basic-addon1"
101       />
102       <InputGroup.Append>
103         <Button
104           type="submit"
105           variant="success"
106           disabled={!newItem.length}
107           className={Submitting ? 'disabled' : ''}
108         >
109           {Submitting ? 'Adding...' : 'Add'}
110         </Button>
111       </InputGroup.Append>
112     </InputGroup>
113   );
114 }
115
116 function ItemDisplay({ item, onItemUpdate, onItemRemoval }) {
117   const { Container, Row, Col, Button } = ReactBootstrap;
118
119   const toggleCompletion = () => {
120     fetch(`/items/${item.id}`, {
121       method: 'PUT',
122       body: JSON.stringify({
123         name: item.name,
124         completed: !item.completed,
125       }),
126       headers: { 'Content-Type': 'application/json' },
127     })
128     .then(r => r.json())
129   }
  
```

/root

- app
 - Dockerfile
 - package.json
- spec
- src
 - index.js
 - routes
 - static
 - css
 - index.html
 - js
 - app.js
 - babel.min.js
 - react-bootstrap.js
 - react-dom.production.min.js
 - react.production.min.js
- yarn.lock
- app.zip

35°C Smoke

Search

ENG IN 16:57 16-11-2023

labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clat17mfml8g009gehs0

00:48:31

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8 node1

IP 192.168.0.8 OPEN PORT 80

Memory 15.70% (627.9MB / 3.906GB)

CPU 0.40%

SSH ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```

=> => transferring context: 2B
=> [internal] load metadata for docker.io/library/node:10-alpine
=> [1/4] FROM docker.io/library/node:10-alpine
=> [internal] load build context
=> => transferring context: 52.92MB
=> CACHED [2/4] WORKDIR /app
=> [3/4] COPY . .
=> [4/4] RUN yarn install --production
=> exporting to image
=> => exporting layers
=> => writing image sha256:18c973e0711ebcd6e7bfaf2ce473d87c13ad7e62bd8e5da5f2cf67b8cb0bee3
=> => naming to docker.io/library/docker-101
[node1] (local) root@192.168.0.8 ~/app
$ 
  
```

33°C Smoke

Search

ENG IN 17:01 16-11-2023

The screenshot shows a web browser window with a blue header bar. The URL is [Not secure | ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/multi-container-apps/](https://ip172-18-0-5-clat16efml8g009gehr0-80.direct.labs.play-with-docker.com/tutorial/multi-container-apps/). The page title is "Multi-Container Apps". On the left, there's a sidebar with a navigation menu under "Docker 101" and "Multi-Container Apps". The main content area is titled "Starting MySQL". It contains text about creating a network and running a MySQL container, followed by a code block:

```
docker run -d \
  --network todo-app --network-alias mysql \
  -v todo-mysql-data:/var/lib/mysql \
  -e MYSQL_ROOT_PASSWORD=secret \
  -e MYSQL_DATABASE=todos \
  mysql:5.7
```

Below the code, a note says: "You'll also see we specified the `--network-alias` flag. We'll come back to that in just a moment."

The screenshot shows a web browser window with a dark-themed interface. The URL is [clat16ef_clat17mfml8g009gehs0](https://labs.play-with-docker.com/p/clat16efml8g009gehr0#clat16ef_clat17mfml8g009gehs0). The interface displays resource usage for two instances: "node1" (IP: 192.168.0.8) and "node2" (IP: 192.168.0.7). The "node1" section includes an "EDITOR" button and a terminal window showing Docker build logs:

```
=> [internal] load build context
=> => transferring context: 52.92MB
=> CACHED [2/4] WORKDIR /app
=> [3/4] COPY . .
=> [4/4] RUN yarn install --production
=> exporting to image
=> => exporting layers
=> => writing image sha256:10c973e07111ebcd6e7bfaf2ce473d87c13ad7e62bd8e5da9f2cf67b0cb0bee3
=> => naming to docker.io/library/docker-101
[node1] (local) root@192.168.0.8 ~/app
$ docker network create todo-app
912ffd949a7ffff3d7ad494881a19bcc41799e7fd7d1d10b74cf54c324c0d8ae
[node1] (local) root@192.168.0.8 ~/app
$
```

00:46:28

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 80

Memory: 22.94% (917.5MB / 3.906GB) CPU: 203.55%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
=> => naming to docker.io/library/docker-101
[node1] (local) root@192.168.0.8 ~/app
$ docker network create todo-app
912fffd949a7ffffd3d7ad49881a19bcc41799e7fd7d10b74cf54c324c0d8ae
[node1] (local) root@192.168.0.8 ~/app
$ ^[[200-docker run -d \
> --network todo-app --network-alias mysql \
> -v todo-mysql-data:/var/lib/mysql \
> -e MYSQL_ROOT_PASSWORD=secret \
> -e MYSQL_DATABASE=todos \
> mysql:5.7-
bash: $'^[[200-docker': command not found
[node1] (local) root@192.168.0.8 ~/app
$ docker run -d \
```

0.0s

33°C Sunset coming Search ENG IN 17:03 16-11-2023

00:46:16

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 80

Memory: 27.59% (1.078GB / 3.906GB) CPU: 38.38%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
6c91fabbb8c2: Pull complete
8f46e806ab5c: Pull complete
29f5af1d1661: Pull complete
62aca7179a54: Pull complete
85023e6de3be: Pull complete
6d5934a87chb: Pull complete
c878502d3f70: Pull complete
4756467c684a: Pull complete
ee9043dd2677: Pull complete
Digest: sha256:f566819f2eee3a60cf5ea6c8b7d1bfc9de62e34268bf62dc34870c4fc8a85d1
Status: Downloaded newer image for mysql:5.7
8c3129e6c9cf4780fe3e6el1dcb5a2d34023fef7fd34e9cb37ebad8d064c844
[node1] (local) root@192.168.0.8 ~/app
$ 
```

33°C Sunset coming Search ENG IN 17:03 16-11-2023

00:43:39

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP 192.168.0.8 **OPEN PORT** 80 **Memory** 34.73% (1.357GiB / 3.906GiB) **CPU** 1.01%
SSH ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
| todos |
+-----+
5 rows in set (0.01 sec)

mysql>
```

33°C Smoke Search ENG IN 17:05 16-11-2023

00:42:12

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP 192.168.0.8 **OPEN PORT** 80 **Memory** 48.95% (1.912GiB / 3.906GiB) **CPU** 0.52%
SSH ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
2517e0a2f862: Pull complete
7b5061a1528d: Pull complete
Digest: sha256:a7c92e1a2fb9287576a16e107166fee7f9925e15d2cla683dbbf4370ba9bfe8
Status: Downloaded newer image for nicolaka/netshoot:latest
          dP      dP      dP
          88      88      88
88d888b. .d8888b. d88888P .d8888b. 88d888b. .d8888b. d88888P
88' `88 88ooooo8 88  Y8oooooo. 88' `88 88' `88 88' `88 88
88  88 88. ... 88  88 88 88. 88 88. 88 88. 88 88
dP  dP `88888P'  dP  `88888P' dP  dP 88888P' `88888P' dP

Welcome to Netshoot! (github.com/nicolaka/netshoot)
Version: 0.11
```

33°C Smoke Search ENG IN 17:07 16-11-2023

00:41:34

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 80

Memory: 48.95% (1.912GB / 3.906GB) CPU: 5.65%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
; ; QUESTION SECTION:
;mysql.          IN      A
; ; ANSWER SECTION:
mysql.          600    IN      A      172.19.0.2
; ; Query time: 0 msec
; ; SERVER: 127.0.0.11#53(127.0.0.11) (UDP)
; ; WHEN: Thu Nov 16 11:37:59 UTC 2023
; ; MSG SIZE rcvd: 44

36cc70988521
```

33°C Smoke 17:08 16-11-2023

00:36:13

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 51.21% (2GB / 3.906GB) CPU: 0.74%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
mysql> select * from todo_items;
Empty set (0.00 sec)

mysql> select * from todo_items;
+-----+-----+-----+
| id   | name | completed |
+-----+-----+-----+
| e460de67-85d5-42ef-9006-d5be1a39876c | Cakes | 0 |
| 637b1c3e-f58a-425a-8ff9-41af9236e842 | Chocolates | 0 |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

33°C Smoke 17:13 16-11-2023

00:26:02

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8 node1
192.168.0.7 node2

IP 192.168.0.8 **OPEN PORT** 3000 80

Memory 34.92% (1.364GB / 3.906GB) **CPU** 91.24%

SSH ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
76effd46d455de99809037fe80e39e40ff9255e0236451a91f133d3757203e2
[node1] (local) root@192.168.0.8 ~/app
$ docker-compose up -d
[+] Building 0.0s (0/0)
[+] Running 4/4
✓ Network app_default      Created          0.1s
✓ Volume "app_todo-mysql-data" Created          0.0s
✓ Container app-app-1       Created          0.1s
✓ Container app-mysql-1     Started          0.1s
Error response from daemon: driver failed programming external connectivity on endpoint app-app-1 (57512994d8dfe871c236a8e76a4d21831fc334acbcb08b674cc514b89c64f48e): Bind for 0.0.0.0:3000 failed: port is already allocated
[node1] (local) root@192.168.0.8 ~/app
$ 
```

33°C Smoke

Search ENG IN 17:23 16-11-2023

00:20:57

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8 node1
192.168.0.7 node2

IP 192.168.0.8 **OPEN PORT** 3000 80

Memory 29.72% (1.161GB / 3.906GB) **CPU** 0.99%

SSH ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE **EDITOR**

```
(node1) (local) root@192.168.0.8 ~/app
$ docker image history docker-101
IMAGE           CREATED             CREATED BY
18c973e07111   27 minutes ago    CMD ["node" "/app/src/index.js"]
e.v0            27 minutes ago    RUN /bin/sh -c yarn install --production # b...
e.v0            28 minutes ago    COPY . . # buildkit
e.v0            3 hours ago      WORKDIR /app
e.v0            2 years ago     /bin/sh -c #(nop)  CMD ["node"]
<missing>        2 years ago     /bin/sh -c #(nop) ENTRYPOINT ["docker-entry_...
<missing>        2 years ago     /bin/sh -c #(nop) COPY file:238737301d473041... 116B
```

33°C Smoke

Search ENG IN 17:28 16-11-2023

00:17:30

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 34.69% (1.355GB / 3.906GB) CPU: 22.66%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
<missing> 2 years ago /bin/sh -c #(nop) ENV YARN_VERSION=1.22.5 0B
<missing> 2 years ago /bin/sh -c addgroup -g 1000 node && addu... 68.8MB
<missing> 2 years ago /bin/sh -c #(nop) ENV NODE_VERSION=10.24.1 0B
<missing> 2 years ago /bin/sh -c #(nop) CMD ["/bin/sh"] 0B
<missing> 2 years ago /bin/sh -c #(nop) ADD file:282b9d56236cae296... 5.62MB
[node1] (local) root@192.168.0.8 ~/app
$ docker build -t docker-101 .
[*] Building 20.3s (8/9)
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 180B 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/node:10-alpine 0.0s
=> [1/5] FROM docker.io/library/node:10-alpine 0.0s
docker:default
```

32°C Sunset 17:32 16-11-2023

00:16:36

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

192.168.0.7
node2

IP: 192.168.0.8 OPEN PORT: 3000 80

Memory: 37.02% (1.446GB / 3.906GB) CPU: 1.06%

SSH: ssh ip172-18-0-5-clat16efml8g009gehr0@direct.labs.play-w

DELETE EDITOR

```
=> [internal] load metadata for docker.io/library/node:10-alpine 0.0s
=> [1/5] FROM docker.io/library/node:10-alpine 0.0s
=> CACHED [2/5] WORKDIR /app 0.0s
=> [internal] load build context 1.1s
=> => transferring context: 551.72kB 1.1s
=> [3/5] COPY package.json yarn.lock ./ 0.2s
=> [4/5] RUN yarn install --production 15.8s
=> [5/5] COPY . 5.6s
=> exporting to image 3.2s
=> => exporting layers 3.2s
=> => writing image sha256:89975e5474b73f4295ae0ff02b19a76f24402d0bf82f5750d8eca00a79f69dd 0.0s
=> => naming to docker.io/library/docker-101 0.0s
[node1] (local) root@192.168.0.8 ~/app
$
```

Top events Event brief 17:33 16-11-2023