



Universidad Galileo / TELUS Digital
Técnico en Desarrollo Fullstack

Tarea:
Contenerización de Aplicación Node.js y Despliegue
Básico

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Curso NodeJS avanzado

ENLACE DE REPOSITORIO:

<https://github.com/L21gt/apisNodeJs-ContenerizacionAppNodeJSDespliegue>

CAPTURAS DE PANTALLA

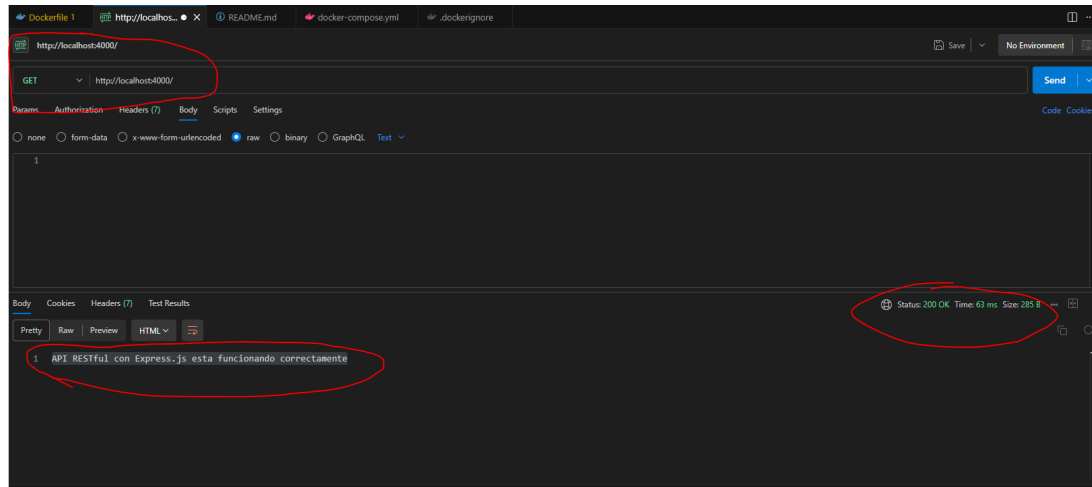
Construcción y Ejecución

```
PS C:\Users\usuario\Desktop\Telus\Galileo FullStack\Cursos grabacion\Semestre 4\NodeJS\Avanzados\Tareas\Contenerizacion de aplicacion nodejs y despliegue basico\tarea4DockerContenerizacionDespliegue> docker compose up --build
[+] Building 107.7s (13/13) FINISHED
=> [internal] load local bake definitions
=> reading from stdin 912B
=> [internal] load build definition from Dockerfile
=> transferring dockerfile: 2.04kB
=> [internal] load metadata for docker.io/library/node:lts-alpine
=> [auth] library/node:pull token for registry-1.docker.io
=> [internal] load .dockerignore
=> transferring context: 603B
=> [1/5] FROM docker.io/library/node:lts-alpine@sha256:2867d550cf9d8bb58059a0ffff528741f11a84d985c732e60e19e8e75c72239c43
=> resolve docker.io/library/node:lts-alpine@sha256:2867d550cf9d8bb58059a0ffff528741f11a84d985c732e60e19e8e75c72239c43
=> [internal] load build context
=> transferring context: 7.42kB
=> CACHED [2/5] WORKDIR /app
=> CACHED [3/5] COPY package*.json ./
=> CACHED [4/5] RUN npm install --omit-dev
=> [5/5] COPY . .
=> exporting to image
=> exporting manifest sha256:04af54908d722e3e5a0fb6ccc3ae2ab518c8fffc4522c26d4df93d8ef1eb7
=> exporting config sha256:e1b1cb528584fcc23872dbf19a8b4f4f857d22fc0167289e172b28215d70bc
=> exporting attestation manifest sha256:1550bf9933beacdc221d648e5c34c6c2778e4960c6c1dab2aed74ab2e8fe04ef
=> exporting manifest list sha256:063f8ce3cc6c0959deb04da1f9b3f84307743ea1796a936fc390f420c8c542fc
=> naming to docker.io/library/tarea4dockercontenerizaciondespliegue-api:latest
=> unpacking to docker.io/library/tarea4dockercontenerizaciondespliegue-api:latest
=> resolving provenance for metadata file
[+] Running 4/4
✔ tarea4dockercontenerizaciondespliegue-api Built 0.0s
✔ Network tarea4dockercontenerizaciondespliegue_default Created 4.7s
✔ Container task_api_db_tarea4 Created 12.1s
✔ Container task_api_app_tarea4 Created 8.3s
Attaching to task_api_app_tarea4, task_api_db_tarea4
task_api_db_tarea4 | PostgreSQL Database directory appears to contain a database; Skipping initialization
task_api_db_tarea4 | 2025-11-18 03:30:50.919 UTC [1] LOG: starting PostgreSQL 13.22 on x86_64-pc-linux-musl, compiled by gcc (Alpine 14.2.0) 14.2.0, 64-bit
task_api_db_tarea4 | 2025-11-18 03:30:50.919 UTC [1] LOG: listening on IPv4 address "0.0.0.0", port 5432
task_api_db_tarea4 | 2025-11-18 03:30:50.919 UTC [1] LOG: listening on IPv6 address "::", port 5432
task_api_db_tarea4 | 2025-11-18 03:30:52.272 UTC [4] LOG: listening on Unix socket "/var/run/postgresql/.s.PGSQL.5432"
task_api_db_tarea4 | 2025-11-18 03:30:53.418 UTC [28] LOG: database system shutdown was interrupted; last known up at 2025-11-18 03:19:25 UTC
task_api_app_tarea4 | [dotenv@17.2.2] injecting env (0) from .env -- tip: observe env with Radar: https://dotenvx.com/radar
task_api_app_tarea4 | [dotenv@17.2.2] injecting env (0) from .env -- tip: encrypt with Dotenvx: https://dotenvx.com
task_api_app_tarea4 | ✔ Servidor corriendo en el puerto http://localhost:4000
task_api_db_tarea4 | 2025-11-18 03:31:23.555 UTC [28] LOG: database system was not properly shut down; automatic recovery in progress
task_api_db_tarea4 | 2025-11-18 03:31:23.879 UTC [28] LOG: redo starts at 0/1500950
task_api_db_tarea4 | 2025-11-18 03:31:23.879 UTC [28] LOG: invalid record length at 0/1500988: wanted 24, got 0
task_api_db_tarea4 | 2025-11-18 03:31:23.879 UTC [28] LOG: redo done at 0/1500950
task_api_db_tarea4 | 2025-11-18 03:31:26.229 UTC [1] LOG: database system is ready to accept connections
```

Verificación de Contenedores

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS POSTMAN CONSOLE
PS C:\Users\usuario\Desktop\Telus\Galileo FullStack\Cursos grabacion\Semestre 4\NodeJS\Avanzados\Tareas\Contenerizacion de aplicacion nodejs y despliegue basico\tarea4DockerContenerizacionDespliegue> docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS                               NAMES
bbb00145fb12   tarea4dockercontenerizaciondespliegue-api "docker-entrypoint.s..." 9 minutes ago   Up 9 minutes   0.0.0.0:4000->4000/tcp, [::]:4000->4000/tcp   task_api_app_tarea4
02c2c27b7380   postgres:13-alpine                  "docker-entrypoint.s..." 10 minutes ago   Up 9 minutes   0.0.0.0:5433->5432/tcp, [::]:5433->5432/tcp   task_api_db_tarea4
6d6e703c1ab0   postgres:13-alpine                  "docker-entrypoint.s..." 2 months ago    Up 6 hours    0.0.0.0:5432->5432/tcp, [::]:5432->5432/tcp   task_api_db
PS C:\Users\usuario\Desktop\Telus\Galileo FullStack\Cursos grabacion\Semestre 4\NodeJS\Avanzados\Tareas\Contenerizacion de aplicacion nodejs y despliegue basico\tarea4DockerContenerizacionDespliegue>
```

Prueba de la API



Despliegue en Play with Docker

01:43:43

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.34
node1

GIVE FEEDBACK

d4dvl929_d4dvlba91nsg00fdbpgg

IP
192.168.0.34

OPEN PORT

Memory
SSH
ssh ip172-18-0-18-d4dvl9291nsg00fdbpg@direct.labs.play

DELETE

EDITOR

```
[*] Building 9.9s (11/11) #FINISHED
=> [api internal] load build definition from Dockerfile
=> => transferring Dockerfile: 2.00kB
=> [api internal] load metadata for docker.io/library/node:lts-alpine
=> [api internal] load .dockerignore
=> => transferring context: 582B
=> [api 1/5] FROM docker.io/library/node:lts-alpine@sha256:2867d550cf9d8bb50059a0ff52874f11a84d985e732e60e19e8e75c7239c43
=> => resolve docker.io/library/node:lts-alpine@sha256:2867d550cf9d8bb50059a0ff52874f11a84d985e732e60e19e8e75c7239c43
=> => sha256:572352f439b3b44d81d07da30e1b64140478de7f3a1fc13d0592c31d5a4ad3 1.26MB / 1.26MB
=> => sha256:e71d3d17be0d9397f82b0dfe5322a48460e78e6d322f992683a5491924 447B / 447B
=> => sha256:2867d550cf9d8bb50059a0ff52874f11a84d985e732e60e19e8e75c7239c43 3.87kB / 3.87kB
=> => sha256:d7a3af308e4006ba6d66bbas980fe39c118049b4e5eeaac8fa89e00944ac2496b 1.72kB / 1.72kB
=> => sha256:49e6cd1279de1597a3b5f335a0b60972ab6cdm4c6d486a6023770d6f0fde 6.50kB / 6.50kB
=> => sha256:0a6de75bfc0f09f5468995f7a10a8a6f3115d1cd0a8295b0f001a3b6f756f0 50.34MB / 50.34MB
=> => extracting sha256:0a6de75bfc0f09f5468995f7a10a8a6f3115d1cd0a8295b0f001a3b6f756f0 2.9s
=> => extracting sha256:572352f439b3b44d81d07da30e1b64140478de7f3a1fc13d0592c31d5a4ad3 0.1s
=> => extracting sha256:e71d3d17be0d9397f82b0dfe5322a48460e78e6d322f992683a5491924 0.0s
=> [api internal] load build context
=> => transferring context: 324.01kB
=> [api 2/5] WORKDIR /app
=> [api 3/5] COPY package*.json ./
=> [api 4/5] RUN npm install --omit=dev
=> [api 5/5] COPY . .
=> [api] exporting to image
=> => exporting layers
=> => writing image sha256:06985a961e0b6c0ac786dia2c0ff1a623bf0e78a15f6db14271f83a0326e4b64
=> => naming to docker.io/library/apinodex:conteneterizacionapnodejsdespliegue-api
=> [api] resolving provenance for metadata file
[*] Running 4/4
[*] Network apinodex--conteneterizacionapnodejsdespliegue_default Created
[*] Volume "apinodex--conteneterizacionapnodejsdespliegue_pgdata" Created
[*] Container task_api_db_tarea4 Started
[*] Container task_api_app_tarea4 Started
[models] (local) root@192.168.0.34 ~/apinodex-ConteneterizacionAppNodeJSDespliegue
$
```

Pruebas en Play with Docker

Contenedores desplegados y corriendo

```
[model] (local) root@192.168.0.34 ~/apisNodeJs-ContenerizacionAppNodeJSDespliegue
$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS                               NAMES
9dd683b5375e   apisnodejs-contenerizacionappnodejsdespliegue-api   "docker-entrypoint.s..." About a minute ago Up About a minute   0.0.0.0:4000->4000/tcp   task_api_app_tare
a4aa200bbb5db7   postgres:13-alpine                                "docker-entrypoint.s..." About a minute ago Up About a minute   0.0.0.0:5433->5432/tcp   task_api_db_tarea
4
```

Aplicación desplegada y verificada en el navegador

