

```
vagrant@mfm2425-docker: /  
[+] Building 482.5s (11/11) FINISHED  
=> [internal] load build definition from Dockerfile  
=> => transferring dockerfile: 683B  
=> [internal] load metadata for docker.io/library/debian:bookworm-slim  
=> [internal] load .dockerignore  
=> => transferring context: 2B  
=> [1/6] FROM docker.io/library/debian:bookworm-slim@sha256:40b107342c492725bc7aacbe93a49945445191ae364184a6d24fedb28172f6f7  
=> [3/6] ADD https://download.redis.io/releases/redis-7.4.2.tar.gz redis.tar.gz  
=> CACHED [2/6] WORKDIR /tmp  
=> CACHED [3/6] ADD https://download.redis.io/releases/redis-7.4.2.tar.gz redis.tar.gz  
=> [4/6] RUN apt-get update && mkdir redis && tar -xzf redis.tar.gz -C redis --strip-components=1 && apt-get install -y  
=> [5/6] WORKDIR /data  
=> [6/6] RUN chown redis:redis /data  
=> exporting to image  
=> => exporting layers  
=> => writing image sha256:72f793db07737a6b0aa9a18ce4b5d8ce4820263d96862879080853270c23b3f2  
=> => naming to docker.io/library/mfm2425-redis  
vagrant@mfm2425-docker:/vagrant/ej1$ docker image ls  
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE  
mfm2425-redis       latest       72f793db0773     51 seconds ago  130MB  
vagrant@mfm2425-docker:/vagrant/ej1$ docker history mfm2425-redis  
IMAGE              CREATED          CREATED BY          SIZE      COMMENT  
72f793db0773       About a minute ago ENTRYPOINT ["redis-server" "--protected-mode... 0B        buildkit.dockerfile.v0  
<missing>          About a minute ago EXPOSE map[6379/tcp:{}] 0B        buildkit.dockerfile.v0  
<missing>          About a minute ago USER redis          0B        buildkit.dockerfile.v0  
<missing>          About a minute ago RUN /bin/sh -c chown redis:redis $REDIS_DATA... 0B        buildkit.dockerfile.v0  
<missing>          About a minute ago WORKDIR /data        0B        buildkit.dockerfile.v0  
<missing>          About a minute ago ENV REDIS_DATA=/data 0B        buildkit.dockerfile.v0  
<missing>          About a minute ago RUN /bin/sh -c apt-get update && mkdir redi... 51.7MB    buildkit.dockerfile.v0  
<missing>          17 minutes ago  ADD https://download.redis.io/releases/redis... 3.53MB    buildkit.dockerfile.v0  
<missing>          17 minutes ago  WORKDIR /tmp         0B        buildkit.dockerfile.v0  
<missing>          2 weeks ago    # debian.sh --arch 'amd64' out/ 'bookworm' '... 74.8MB    debuerreotype 0.15  
vagrant@mfm2425-docker:/vagrant/ej1$
```

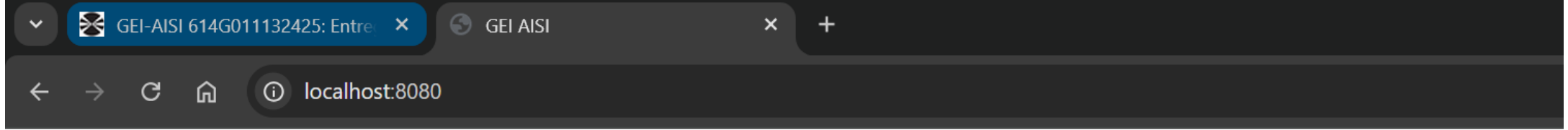
```
vagrant@mfm2425-docker: /  × + v
1:M 17 Feb 2025 18:22:37.583 # Redis is now ready to exit, bye bye...
vagrant@mfm2425-docker:/vagrant/ej1$ docker run -d --rm --name redis-server mfm2425-redis
3448bd55757f9a96fb10bb26151d14946514e9e109ceb1a4fd42ec692c58fdac8
vagrant@mfm2425-docker:/vagrant/ej1$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
3448bd55757f   mfm2425-redis  "redis-server '--pro..." 10 seconds ago Up 10 seconds 6379/tcp     redis-server
vagrant@mfm2425-docker:/vagrant/ej1$ docker logs redis-server
1:C 17 Feb 2025 18:23:00.093 # WARNING Memory overcommit must be enabled! Without it, a background save or replication may fail under
low memory condition. Being disabled, it can also cause failures without low memory condition, see https://github.com/jemalloc/jemal
loc/issues/1328. To fix this issue add 'vm.overcommit_memory = 1' to /etc/sysctl.conf and then reboot or run the command 'sysctl vm.o
vercommit_memory=1' for this to take effect.
1:C 17 Feb 2025 18:23:00.097 * o000o000o000o Redis is starting o000o000o000o
1:C 17 Feb 2025 18:23:00.097 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 17 Feb 2025 18:23:00.097 * Configuration loaded
1:M 17 Feb 2025 18:23:00.097 * monotonic clock: POSIX clock_gettime
1:M 17 Feb 2025 18:23:00.099 * Running mode=standalone, port=6379.
1:M 17 Feb 2025 18:23:00.099 * Server initialized
1:M 17 Feb 2025 18:23:00.099 * Ready to accept connections tcp
vagrant@mfm2425-docker:/vagrant/ej1$ docker network inspect frontend
[]
Error response from daemon: network frontend not found
vagrant@mfm2425-docker:/vagrant/ej1$ docker inspect --format
flag needs an argument: --format
See 'docker inspect --help'.
vagrant@mfm2425-docker:/vagrant/ej1$ docker inspect --format "{{.NetworkSettings.IPAddress}}" redis-server
172.17.0.2
vagrant@mfm2425-docker:/vagrant/ej1$ docker run --name redis-client --entrypoint redis-cli mfm2425-redis -h 172.17.0.2 ping
PONG
vagrant@mfm2425-docker:/vagrant/ej1$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
d40047b0eab9   mfm2425-redis  "redis-cli -h 172.17..." 15 seconds ago Exited (0) 15 seconds ago
3448bd55757f   mfm2425-redis  "redis-server '--pro..." 11 minutes ago Up 11 minutes 6379/tcp     redis-server
vagrant@mfm2425-docker:/vagrant/ej1$
```

```

vagrant@mfm2425-docker: /vagrant/ej2$ docker run --rm --name redis-server mfm2425-redis
mfm2425-redis          mfm2425-redis-multi          mfm2425-redis-multi:latest  mfm2425-redis:latest
vagrant@mfm2425-docker: /vagrant/ej2$ docker image ls
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
mfm2425-redis-multi  latest       8f9345a1e2c5     About a minute ago  39.4MB
mfm2425-redis        latest       72f793db0773     25 hours ago      130MB
vagrant@mfm2425-docker: /vagrant/ej2$ docker history mfm2425-redis-multi
IMAGE              CREATED          CREATED BY          SIZE              COMMENT
8f9345a1e2c5       About a minute ago  ENTRYPOINT ["redis-server" "--protected-mode...  0B                buildkit.dockerfile.v0
<missing>          About a minute ago  COPY /tmp/redis/src/redis-cli /usr/local/bin...  7.22MB            buildkit.dockerfile.v0
<missing>          About a minute ago  COPY /tmp/redis/src/redis-server /usr/local/...  16.6MB            buildkit.dockerfile.v0
<missing>          19 minutes ago    EXPOSE map[6379/tcp:{}]  0B                buildkit.dockerfile.v0
<missing>          19 minutes ago    USER redis           0B                buildkit.dockerfile.v0
<missing>          19 minutes ago    RUN /bin/sh -c addgroup -S redis && adduser...  3.06kB            buildkit.dockerfile.v0
<missing>          19 minutes ago    WORKDIR /data         0B                buildkit.dockerfile.v0
<missing>          19 minutes ago    ENV REDIS_DATA=/data  0B                buildkit.dockerfile.v0
<missing>          3 days ago        RUN /bin/sh -c ALPINE_GLIBC_BASE_URL="https:...  7.75MB            buildkit.dockerfile.v0
<missing>          3 days ago        ENV LANG=C.UTF-8      0B                buildkit.dockerfile.v0
<missing>          4 days ago        CMD ["/bin/sh"]       0B                buildkit.dockerfile.v0
<missing>          4 days ago        ADD alpine-minirootfs-3.20.6-x86_64.tar.gz /...  7.8MB             buildkit.dockerfile.v0
vagrant@mfm2425-docker: /vagrant/ej2$ docker run --rm --name redis-server mfm2425-redis-multi
1:C 18 Feb 2025 18:55:13.536 # WARNING Memory overcommit must be enabled! Without it, a background save or replication may fail under
low memory condition. Being disabled, it can also cause failures without low memory condition, see https://github.com/jemalloc/jemal
loc/issues/1328. To fix this issue add 'vm.overcommit_memory = 1' to /etc/sysctl.conf and then reboot or run the command 'sysctl vm.o
vercommit_memory=1' for this to take effect.
1:C 18 Feb 2025 18:55:13.537 * o000o000o000o Redis is starting o000o000o000o
1:C 18 Feb 2025 18:55:13.538 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 18 Feb 2025 18:55:13.539 * Configuration loaded
1:M 18 Feb 2025 18:55:13.543 * monotonic clock: POSIX clock_gettime
1:M 18 Feb 2025 18:55:13.545 * Running mode=standalone, port=6379.
1:M 18 Feb 2025 18:55:13.547 * Server initialized
1:M 18 Feb 2025 18:55:13.548 * Ready to accept connections tcp

```

```
vagrant@mfm2425-docker: ~ × + ▾
vagrant@mfm2425-docker:~$ docker volume create redis-vol
redis-vol
vagrant@mfm2425-docker:~$ docker volume ls
DRIVER      VOLUME NAME
local       redis-vol
vagrant@mfm2425-docker:~$ docker inspect redis-vol
[
  {
    "CreatedAt": "2025-02-24T17:01:11Z",
    "Driver": "local",
    "Labels": null,
    "Mountpoint": "/var/lib/docker/volumes/redis-vol/_data",
    "Name": "redis-vol",
    "Options": null,
    "Scope": "local"
  }
]
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$ docker run --rm -d --name redis-server -v redis-vol:/data mfm2425-redis-multi
6d076bf6b70bdf4e7dc5fa04baccbdeaf4beaa62a70b180d3ba969d3b9a585f2
vagrant@mfm2425-docker:~$ docker run --rm --name redis-client --entrypoint redis-cli mfm2425-redis-multi -h 172.17.0.2 incr hits
1
vagrant@mfm2425-docker:~$ docker run --rm --name redis-client --entrypoint redis-cli mfm2425-redis-multi -h 172.17.0.2 incr hits
2
vagrant@mfm2425-docker:~$ docker rm -f redis-server
redis-server
vagrant@mfm2425-docker:~$ docker run --rm -d --name redis-server -v redis-vol:/data mfm2425-redis-multi
4c312638e7e31ea39a9afe5c4efe7f7a7da69c3cced06bb68fcc62e6096a3f03
vagrant@mfm2425-docker:~$ docker run --rm --name redis-client --entrypoint redis-cli mfm2425-redis-multi -h 172.17.0.2 get hits
2
vagrant@mfm2425-docker:~$ docker run --rm --name redis-client --entrypoint redis-cli mfm2425-redis-multi -h 172.17.0.2 incr hits
3
vagrant@mfm2425-docker:~$ sudo ls -lh /var/lib/docker/volumes/redis-vol/_data
total 4.0K
-rw-r--r-- 1 systemd-network systemd-journal 101 Feb 24 17:02 dump.rdb
```



GEI AISI: 2024/2025

Flask+Redis WebApp (Docker)

Página web de Manuel Fontenlos Mato

URL: <http://localhost:8080/>

Sun Mar 09 2025 11:23:30 GMT+0100 (hora estándar de Europa central)

Redis container: redis-server

Redis connection status: PASSED

Redis counter: 832

Web Server IP: 172.17.0.3 | Client IP: 10.0.2.2

```
vagrant@mfm2425-docker:/vagrant$
vagrant@mfm2425-docker:/vagrant$ docker ps -a
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS              PORTS
3b8009283ca6   mfm2425-web                        "flask run"             About a minute ago    Up About a minute (healthy)    0.0.0.0:80->5000/tcp, [::]:80->5000/tcp   webapp
4c312638e7e3   mfm2425-redis-multi               "redis-server '--pro..." 21 minutes ago      Up 21 minutes          6379/tcp
redis-server
vagrant@mfm2425-docker:/vagrant$
vagrant@mfm2425-docker:/vagrant$ docker logs webapp
* Serving Flask app 'counter.py'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.17.0.3:5000
Press CTRL+C to quit
vagrant@mfm2425-docker:/vagrant$ |
* Debugger is active!
* Debugger PIN: 124-716-328
127.0.0.1 - - [24/Feb/2025 17:23:12] "GET / HTTP/1.1" 200 -
```



```
vagrant@mfm2425-docker: ~ ✕ + ▾
vagrant@mfm2425-docker:~$ docker compose -f /vagrant/ej5/compose.yml up
[+] Running 2/2
  ✔ Container ej5-redis-1    Created                                0.0s
  ✔ Container ej5-webapp-1   Created                                0.0s
Attaching to redis-1, webapp-1
redis-1 | 1:C 24 Feb 2025 18:26:58.623 # WARNING Memory overcommit must be enabled! Without it, a background save or replication may fail under low memory condition. Being disabled, it can also cause failures without low memory condition, see https://github.com/jemalloc/jemalloc/issues/1328. To fix this issue add 'vm.overcommit_memory = 1' to /etc/sysctl.conf and then reboot or run the command 'sysctl vm.overcommit_memory=1' for this to take effect.
redis-1 | 1:C 24 Feb 2025 18:26:58.623 * o000o000o000o Redis is starting o000o000o000o
redis-1 | 1:C 24 Feb 2025 18:26:58.623 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just started
redis-1 | 1:C 24 Feb 2025 18:26:58.623 * Configuration loaded
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * monotonic clock: POSIX clock_gettime
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * Running mode=standalone, port=6379.
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * Server initialized
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * Loading RDB produced by version 7.4.2
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * RDB age 2 seconds
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * RDB memory usage when created 0.90 Mb
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * Done loading RDB, keys loaded: 1, keys expired: 0.
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * DB loaded from disk: 0.000 seconds
redis-1 | 1:M 24 Feb 2025 18:26:58.624 * Ready to accept connections tcp
webapp-1 | * Serving Flask app 'counter.py'
webapp-1 | * Debug mode: on
webapp-1 | WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
webapp-1 | * Running on all addresses (0.0.0.0)
webapp-1 | * Running on http://127.0.0.1:5000
webapp-1 | * Running on http://172.18.0.3:5000
webapp-1 | Press CTRL+C to quit
webapp-1 | * Restarting with stat
webapp-1 | * Debugger is active!
webapp-1 | * Debugger PIN: 170-870-854
webapp-1 | 10.0.2.2 - - [24/Feb/2025 18:27:05] "GET / HTTP/1.1" 200 -
redis-1 | 1:M 24 Feb 2025 18:27:05.532 * 1 changes in 5 seconds. Saving...
redis-1 | 1:M 24 Feb 2025 18:27:05.534 * Background saving started by pid 11
redis-1 | 11:C 24 Feb 2025 18:27:05.538 * DB saved on disk
redis-1 | 11:C 24 Feb 2025 18:27:05.542 * Fork CoW for RDB: current 0 MB, peak 0 MB, average 0 MB
redis-1 | 1:M 24 Feb 2025 18:27:05.636 * Background saving terminated with success
webapp-1 | 127.0.0.1 - - [24/Feb/2025 18:27:13] "GET / HTTP/1.1" 200 -
redis-1 | 1:M 24 Feb 2025 18:27:13.912 * 1 changes in 5 seconds. Saving...
redis-1 | 1:M 24 Feb 2025 18:27:13.912 * Background saving started by pid 12
redis-1 | 12:C 24 Feb 2025 18:27:13.914 * DB saved on disk
```

```

vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$ docker compose -f /vagrant/ej5/compose.yml ps
NAME                IMAGE                COMMAND                SERVICE    CREATED        STATUS                PORTS
ej5-redis-1         mfm2425-redis-multi "redis-server '--pro..." redis      3 minutes ago    Up 2 minutes                6379/tcp
ej5-webapp-1        mfm2425-web         "flask run"           webapp     3 minutes ago    Up 2 minutes (healthy)    0.0.0.0:80->5000/tcp, [::]:80->5000/tcp
vagrant@mfm2425-docker:~$ docker ps
CONTAINER ID        IMAGE                COMMAND                CREATED        STATUS                PORTS                NAMES
365f880745be      mfm2425-web         "flask run"           3 minutes ago    Up 2 minutes (healthy)    0.0.0.0:80->5000/tcp, [::]:80->5000/tcp    ej5-webapp-1
4428bb887d33      mfm2425-redis-multi "redis-server '--pro..." 3 minutes ago    Up 3 minutes                6379/tcp                ej5-redis-1
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$ curl -s http://localhost | grep "Redis counter"
<p>Redis counter : <span style="color: green;">855</span></p>
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$ sed -i 's/Redis counter/New Redis counter /g' /vagrant/ej4/src/templates/index.html
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$ curl -s http://localhost | grep "Redis counter"
<p>New Redis counter : <span style="color: green;">858</span></p>
vagrant@mfm2425-docker:~$

```



```

vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$ docker stack ls
NAME                SERVICES
mfm2425-stack       2
vagrant@mfm2425-docker:~$ docker stack services mfm2425-stack
ID                NAME                MODE                REPLICAS    IMAGE                                PORTS
9r047114lbg2     mfm2425-stack_redis replicated          1/1         localhost:5000/mfm2425-redis-multi:latest
2h3sx5wuuu0o     mfm2425-stack_webapp replicated          3/3         localhost:5000/mfm2425-web:latest    *:80->5000/tcp
vagrant@mfm2425-docker:~$ docker stack ps mfm2425-stack
ID                NAME                IMAGE                                NODE                DESIRED STATE    CURRENT STATE    ERROR    PORTS
xkloqgd699dx     mfm2425-stack_redis.1 localhost:5000/mfm2425-redis-multi:latest mfm2425-docker      Running          Running about a minute ago
r8hi137ao7fi     mfm2425-stack_webapp.1 localhost:5000/mfm2425-web:latest mfm2425-docker      Running          Running about a minute ago
ts5ulniym3l9     mfm2425-stack_webapp.2 localhost:5000/mfm2425-web:latest mfm2425-docker-worker Running          Running about a minute ago
q2ysl86h28x8     mfm2425-stack_webapp.3 localhost:5000/mfm2425-web:latest mfm2425-docker-worker Running          Running about a minute ago
vagrant@mfm2425-docker:~$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED             STATUS              PORTS              NAMES
9ebe4103cdf6   localhost:5000/mfm2425-web:latest   "flask run"             About a minute ago  Up About a minute (healthy)  5000/tcp           mfm2425-stack_webapp.1.r
8hi137ao7fig2lbiyln1kqf2
6fd75271a0e8   localhost:5000/mfm2425-redis-multi:latest "redis-server '--pro..." About a minute ago  Up About a minute              6379/tcp           mfm2425-stack_redis.1.xk
loqgd699dxqgja9tv33thqa
559a3304962b   registry:2.8.3                      "/entrypoint.sh /etc..." 46 minutes ago     Up 46 minutes              5000/tcp           registry.1.rivytiqpnlg9m
ufw4nmfdmvqx
vagrant@mfm2425-docker:~$ |

```

```
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$
vagrant@mfm2425-docker:~$ docker stack services mfm2425-stack
ID                NAME                MODE                REPLICAS            IMAGE                PORTS
9r047114lbg2      mfm2425-stack_redis  replicated          1/1                  localhost:5000/mfm2425-redis-multi:latest
2h3sx5wuuu0o      mfm2425-stack_webapp replicated          3/3                  localhost:5000/mfm2425-web:latest          *:80->5000/tcp
```

```
vagrant@mfm2425-docker:~$ docker service scale mfm2425-stack_webapp=4
mfm2425-stack_webapp scaled to 4
overall progress: 4 out of 4 tasks
1/4: running      [=====>]
2/4: running      [=====>]
3/4: running      [=====>]
4/4: running      [=====>]
```

```
verify: Service mfm2425-stack_webapp converged
vagrant@mfm2425-docker:~$ docker stack services mfm2425-stack
ID                NAME                MODE                REPLICAS            IMAGE                PORTS
9r047114lbg2      mfm2425-stack_redis  replicated          1/1                  localhost:5000/mfm2425-redis-multi:latest
2h3sx5wuuu0o      mfm2425-stack_webapp replicated          4/4                  localhost:5000/mfm2425-web:latest          *:80->5000/tcp
```

```
vagrant@mfm2425-docker:~$ docker stack ps mfm2425-stack
ID                NAME                IMAGE                NODE                DESIRED STATE       CURRENT STATE       ERROR                PORTS
xkloqgd699dx      mfm2425-stack_redis.1  localhost:5000/mfm2425-redis-multi:latest  mfm2425-docker      Running              Running 7 minutes ago
6aglsehxta2m      mfm2425-stack_webapp.1  localhost:5000/mfm2425-web:latest          mfm2425-docker      Running              Running 3 minutes ago
r8hi137ao7fi      \_ mfm2425-stack_webapp.1  localhost:5000/mfm2425-web:latest          mfm2425-docker      Shutdown             Failed 4 minutes ago  "task: non-zero exit (137)"
ts5ulniym3l9      mfm2425-stack_webapp.2  localhost:5000/mfm2425-web:latest          mfm2425-docker-worker Running              Running 6 minutes ago
q2ysl86h28x8      mfm2425-stack_webapp.3  localhost:5000/mfm2425-web:latest          mfm2425-docker-worker Running              Running 6 minutes ago
lh28npkzqly5      mfm2425-stack_webapp.4  localhost:5000/mfm2425-web:latest          mfm2425-docker      Running              Running 32 seconds ago
```

```
vagrant@mfm2425-docker:~$ docker service scale mfm2425-stack_webapp=2
mfm2425-stack_webapp scaled to 2
overall progress: 2 out of 2 tasks
1/2: running      [=====>]
2/2: running      [=====>]
```

```
verify: Service mfm2425-stack_webapp converged
vagrant@mfm2425-docker:~$ docker stack services mfm2425-stack
ID                NAME                MODE                REPLICAS            IMAGE                PORTS
9r047114lbg2      mfm2425-stack_redis  replicated          1/1                  localhost:5000/mfm2425-redis-multi:latest
2h3sx5wuuu0o      mfm2425-stack_webapp replicated          2/2                  localhost:5000/mfm2425-web:latest          *:80->5000/tcp
```

```
vagrant@mfm2425-docker:~$ |
```

vagrant@mfm2425-docker:~\$

vagrant@mfm2425-docker:~\$

vagrant@mfm2425-docker:~\$

```
docker service ls
ID                NAME      MODE     REPLICAS  IMAGE                                  PORTS
rmbpuzbc7qu0     redis     replicated 1/1        localhost:5000/mfm2425-redis-multi:latest
w2c2ltq3b1bk     registry replicated 1/1        registry:2.8.3                *:5000->5000/tcp
so3v30ts7hod     webapp    replicated 5/5        localhost:5000/mfm2425-web:latest  *:80->5000/tcp
```

vagrant@mfm2425-docker:~\$

```
docker service ps redis webapp
ID                NAME      IMAGE                                  NODE                DESIRED STATE  CURRENT STATE      ERROR      PORTS
crpuy6ulbua3     redis.1   localhost:5000/mfm2425-redis-multi:latest  mfm2425-docker     Running        Running 15 seconds ago
17fdla8khhmm     webapp.1  localhost:5000/mfm2425-web:latest          mfm2425-docker-worker Running        Running about a minute ago
k3gao7urqs9m     webapp.2  localhost:5000/mfm2425-web:latest          mfm2425-docker-worker Running        Running about a minute ago
vwvqv9dzo477     webapp.3  localhost:5000/mfm2425-web:latest          mfm2425-docker     Running        Running about a minute ago
rp4541ilcest     webapp.4  localhost:5000/mfm2425-web:latest          mfm2425-docker-worker Running        Running about a minute ago
bfiupb5ypi1g     webapp.5  localhost:5000/mfm2425-web:latest          mfm2425-docker     Running        Running about a minute ago
```

vagrant@mfm2425-docker:~\$

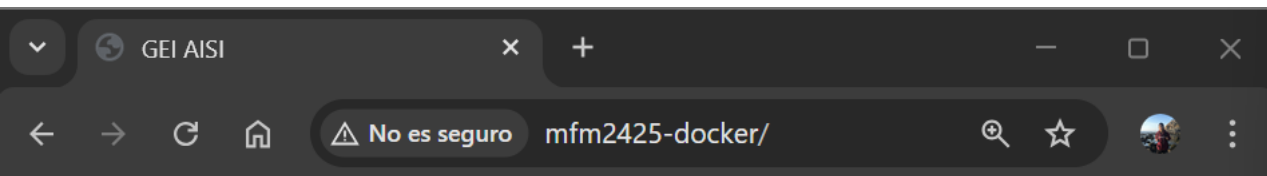
```
docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED          STATUS              PORTS              NAMES
0e14ea4bbe6f   localhost:5000/mfm2425-redis-multi:latest  "redis-server '--pro..."  24 seconds ago   Up 23 seconds      6379/tcp           redis.1.crpuy6ulbua3f9xp
ojum1b4xv      f20f7fada820  localhost:5000/mfm2425-web:latest  "flask run"        About a minute ago   Up About a minute (healthy)  5000/tcp           webapp.3.vwvqv9dzo477zp9
fau61axeet     bd9837dcdc09  localhost:5000/mfm2425-web:latest  "flask run"        About a minute ago   Up About a minute (healthy)  5000/tcp           webapp.5.bfiupb5ypi1g5w3
tsllfbcngn     a818ade799a0  registry:2.8.3                    "/entrypoint.sh /etc..."  8 minutes ago       Up 7 minutes        5000/tcp           registry.1.aevj3pne38sgv
```

vagrant@mfm2425-docker:~\$ |

```
vagrant@mf2425-docker:~$  
vagrant@mf2425-docker:~$ docker service inspect --pretty webapp
```

```
ID:          vfn4zukboefm1vto41c2cpiry  
Name:        webapp  
Service Mode: Replicated  
Replicas:    5  
Placement:  
UpdateConfig:  
  Parallelism: 1  
  On failure:   pause  
  Monitoring Period: 5s  
  Max failure ratio: 0  
  Update order: stop-first  
RollbackConfig:  
  Parallelism: 1  
  On failure:   pause  
  Monitoring Period: 5s  
  Max failure ratio: 0  
  Rollback order: stop-first  
ContainerSpec:  
  Image:        localhost:5000/mf2425-web:latest@sha256:8397993792ddc8d94cdb5c1aeca47926215f04ce42997cf26d20e026df9cef3  
  Init:         false  
Mounts:  
  Target:       /src  
  Source:       /vagrant/ej4/src  
  ReadOnly:     false  
  Type:         bind  
Resources:  
Networks: mynetwork  
Endpoint Mode: vip  
Ports:  
  PublishedPort = 80  
  Protocol = tcp  
  TargetPort = 5000  
  PublishMode = ingress
```

```
vagrant@mf2425-docker:~$ curl -s localhost | grep "redis counter"  
<p>New redis counter : <span style="color: green;">722</span></p>  
vagrant@mf2425-docker:~$ |
```



GEI AISI: 2024/2025

Flask+Redis WebApp (Docker)

Página web de Manuel Fontenlos Mato

URL: <http://mfm2425-docker/>

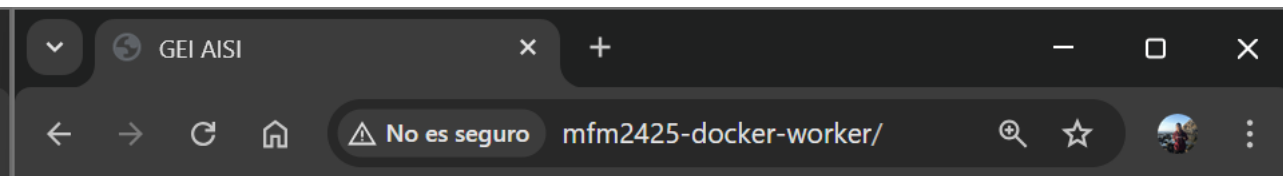
Fri Mar 07 2025 20:54:26 GMT+0100 (hora estándar de Europa central)

Redis container: **redis**

Redis connection status: **PASSED**

New redis counter : **815**

Web Server IP: **10.0.0.203** | Client IP: **10.0.0.2**



GEI AISI: 2024/2025

Flask+Redis WebApp (Docker)

Página web de Manuel Fontenlos Mato

URL: <http://mfm2425-docker-worker/>

Fri Mar 07 2025 20:54:46 GMT+0100 (hora estándar de Europa central)

Redis container: **redis**

Redis connection status: **PASSED**

New redis counter : **816**

Web Server IP: **10.0.0.203** | Client IP: **10.0.0.3**