

E1:

```
vagrant@svr2425-docker:~/ej1$ docker image ls
REPOSITORY          TAG             IMAGE ID         CREATED          SIZE
svr2425-redis        latest          b7c9e79eab63    9 minutes ago   109MB
vagrant@svr2425-docker:~/ej1$ docker history svr2425-redis
IMAGE               CREATED             CREATED BY                                      SIZE      COMMENT
b7c9e79eab63        10 minutes ago     ENTRYPOINT ["redis-server" "--protected-mode... 0B        buildkit.dockerfile.v0
<missing>           10 minutes ago     EXPOSE map[6379/tcp:{}]                      0B        buildkit.dockerfile.v0
<missing>           10 minutes ago     USER redis                                    0B        buildkit.dockerfile.v0
<missing>           10 minutes ago     RUN /bin/sh -c groupadd -r redis && useradd ... 4.3kB     buildkit.dockerfile.v0
<missing>           10 minutes ago     WORKDIR /data                                 0B        buildkit.dockerfile.v0
<missing>           10 minutes ago     ENV REDIS_DATA=/data                         0B        buildkit.dockerfile.v0
<missing>           10 minutes ago     RUN /bin/sh -c apt-get update && apt-get... 31.1MB    buildkit.dockerfile.v0
<missing>           22 hours ago       ADD https://download.redis.io/releases/redis... 3.53MB    buildkit.dockerfile.v0
<missing>           23 hours ago       WORKDIR /tmp                                  0B        buildkit.dockerfile.v0
<missing>           13 days ago        # debian.sh --arch 'amd64' out/ 'bookworm' '...' 74.8MB    debuerreotype 0.15
vagrant@svr2425-docker:~/ej1$
```

```
vagrant@svr2425-docker:~/ej1$ docker run --name redis-client --entrypoint redis-cli svr2425-redis -h 172.17.0.2 ping
PONG
vagrant@svr2425-docker:~/ej1$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS              PORTS          NAMES
ee19eef0e3f1   svr2425-redis "redis-cli -h 172.17..." 4 seconds ago   Exited (0) 4 seconds ago              redis-client
f5ab6cc27fd1   svr2425-redis "redis-server --prot..." 3 minutes ago   Up 3 minutes      6379/tcp      redis-server
vagrant@svr2425-docker:~/ej1$
```

E2:

```
vagrant@svr2425-docker:~/ej2$ docker image ls
REPOSITORY          TAG             IMAGE ID         CREATED          SIZE
svr2425-redis-multi latest          bcd5faa49306    5 minutes ago   39.4MB
svr2425-redis        latest          d678401f87b0    29 minutes ago   137MB
vagrant@svr2425-docker:~/ej2$ docker history svr2425-redis-multi
IMAGE               CREATED             CREATED BY                                      SIZE      COMMENT
bcd5faa49306        6 minutes ago     ENTRYPOINT ["redis-server" "--protected-mode... 0B        buildkit.dockerfile.v0
<missing>           6 minutes ago     COPY /usr/local/bin/redis-cli /usr/local/bin... 7.22MB    buildkit.dockerfile.v0
<missing>           6 minutes ago     COPY /usr/local/bin/redis-server /usr/local/... 16.6MB    buildkit.dockerfile.v0
<missing>           9 minutes ago     EXPOSE map[6379/tcp:{}]                      0B        buildkit.dockerfile.v0
<missing>           9 minutes ago     USER redis                                    0B        buildkit.dockerfile.v0
<missing>           9 minutes ago     RUN /bin/sh -c addgroup -S redis && adduser ... 3.06kB     buildkit.dockerfile.v0
<missing>           9 minutes ago     WORKDIR /data                                 0B        buildkit.dockerfile.v0
<missing>           9 minutes ago     ENV REDIS_DATA=/data                         0B        buildkit.dockerfile.v0
<missing>           3 weeks ago       RUN /bin/sh -c ALPINE_GLIBC_BASE_URL="https:... 7.75MB    buildkit.dockerfile.v0
<missing>           3 weeks ago       ENV LANG=C.UTF-8                             0B        buildkit.dockerfile.v0
<missing>           3 weeks ago       CMD ["/bin/sh"]                              0B        buildkit.dockerfile.v0
<missing>           3 weeks ago       ADD alpine-minirootfs-3.20.6-x86_64.tar.gz /... 7.8MB     buildkit.dockerfile.v0
vagrant@svr2425-docker:~/ej2$ docker run --rm --name redis-server svr2425-redis-multi
1:C 08 Mar 2025 21:05:18.259 # 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 htt
ps://github.com/jemalloc/jemalloc/issues/1328. To fix this issue add 'vm.overcommit_memory = 1' to /etc/sysctl.conf an
d then reboot or run the command 'sysctl vm.overcommit_memory=1' for this to take effect.
1:C 08 Mar 2025 21:05:18.259 * oOoOoOoOoOoOo Redis is starting oOoOoOoOoOoOo
1:C 08 Mar 2025 21:05:18.259 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 08 Mar 2025 21:05:18.259 * Configuration loaded
1:M 08 Mar 2025 21:05:18.260 * monotonic clock: POSIX clock_gettime
1:M 08 Mar 2025 21:05:18.260 * Running mode=standalone, port=6379.
1:M 08 Mar 2025 21:05:18.261 * Server initialized
1:M 08 Mar 2025 21:05:18.261 * Ready to accept connections tcp

```

E3:

```

vagrant@svr2425-docker:~/ej2$ docker volume create redis-vol
redis-vol
vagrant@svr2425-docker:~/ej2$ docker volume ls
DRIVER      VOLUME NAME
local       redis-vol
vagrant@svr2425-docker:~/ej2$ docker inspect redis-vol
[
  {
    "CreatedAt": "2025-03-08T21:09:07Z",
    "Driver": "local",
    "Labels": null,
    "Mountpoint": "/var/lib/docker/volumes/redis-vol/_data",
    "Name": "redis-vol",
    "Options": null,
    "Scope": "local"
  }
]
vagrant@svr2425-docker:~/ej2$ docker run -d --rm --name redis-server -v redis-vol:/data svr2425-redis-multi
d817bf1d2bbe0c0ac705b1c0b2dd85439b9bb04a19ef4122d27d42d9eb3d2de1
vagrant@svr2425-docker:~/ej2$ docker run --rm --name redis-client --entrypoint redis-cli svr2425-redis-multi -h 172.17.0.2 incr hits
1
vagrant@svr2425-docker:~/ej2$ docker run --rm --name redis-client --entrypoint redis-cli svr2425-redis-multi -h 172.17.0.2 incr hits
2
vagrant@svr2425-docker:~/ej2$ docker run -d --rm --name redis-server -v redis-vol:/data svr2425-redis-multi
docker: Error response from daemon: Conflict. The container name "/redis-server" is already in use by container "d817bf1d2bbe0c0ac705b1c0b2dd85439b9bb04a19ef4122d27d42d9eb3d2de1". You have to remove (or rename) that container to be able to reuse that name.

Run 'docker run --help' for more information
vagrant@svr2425-docker:~/ej2$ docker rm -f redis-server
redis-server
vagrant@svr2425-docker:~/ej2$ docker run -d --rm --name redis-server -v redis-vol:/data svr2425-redis-multi
94dc8498c7ce4bed49ab7bb63aa70db45f32c3a06fcfb744ed62d94eb52d889e
vagrant@svr2425-docker:~/ej2$ docker run --rm --name redis-client --entrypoint redis-cli svr2425-redis-multi -h 172.17.0.2 get hits
2
vagrant@svr2425-docker:~/ej2$ docker run --rm --name redis-client --entrypoint redis-cli svr2425-redis-multi -h 172.17.0.2 incr hits
3
vagrant@svr2425-docker:~/ej2$ sudo ls -lh /var/lib/docker/volumes/redis-vol/_data
total 4.0K
-rw-r--r-- 1 systemd-network systemd-journal 101 Mar  8 22:28 dump.rdb
vagrant@svr2425-docker:~/ej2$

```



localhost:8080

E4:

GEI AISI: 2024/2025

Flask+Redis WebApp (Docker)

Página web de Sergio Vila Riveira

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

Sat Mar 08 2025 23:36:41 GMT+0100 (Central European Standard Time)

Redis container: **redis-server**

Redis connection status: **PASSED**

New New Redis counter: **4**

Web Server IP: **172.17.0.3** | Client IP: **10.0.2.2**

```

vagrant@svr2425-docker:/vagrant/ej4$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
94dc8498c7ce   svr2425-redis-multi   "redis-server --prot..."  9 minutes ago   Up 9 minutes   6379/tcp     redis-server
vagrant@svr2425-docker:/vagrant/ej4$ docker run -d --rm --name webapp -p 80:5000 --link redis-server:redis svr2425-web
6fc346c0428a1fc237c10c800f336244e20b4e1bcd8ded788c2b9593eaf87337
vagrant@svr2425-docker:/vagrant/ej4$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
6fc346c0428a   svr2425-web    "flask run"              10 seconds ago   Up 10 seconds (health: starting)   0.0.0.0:80->5000/tcp, [::]:80->5000/tcp   webapp
94dc8498c7ce   svr2425-redis-multi   "redis-server --prot..."  12 minutes ago   Up 12 minutes   6379/tcp     redis-server
vagrant@svr2425-docker:/vagrant/ej4$ 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
* Restarting with stat
* Debugger is active!
* Debugger PIN: 120-582-024
vagrant@svr2425-docker:/vagrant/ej4$

```

E5:

```
=> CACHED [3/5] RUN apk --no-cache add curl 0.0s
=> CACHED [4/5] WORKDIR /src 0.0s
=> CACHED [5/5] COPY src /src 0.0s
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:9fa6a5603bd12a20f9dd43e5dedfd67f58dbba200ff98f704bb456a9e0602034 0.0s
=> => naming to docker.io/library/svr2425-web 0.0s
vagrant@svr2425-docker:/vagrant/ej4$ docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
svr2425-web         latest          9fa6a5603bd1   15 minutes ago 66.3MB
svr2425-redis-multi latest          bcd5faa49306   2 hours ago    39.4MB
svr2425-redis       latest          d678401f87b0   2 hours ago    137MB
vagrant@svr2425-docker:/vagrant/ej4$ docker compose -f compose.yml up
[+] Running 3/3
  ✓ Network ej4_default    Created           0.1s
  ✓ Container ej4-redis-1  Created           0.0s
  ✓ Container ej4-webapp-1 Created           0.0s
Attaching to redis-1, webapp-1
redis-1 | 1:C 08 Mar 2025 22:48:05.223 # 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 co
ndition, 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 08 Mar 2025 22:48:05.223 * o000o000o000o Redis is starting o000o000o000o
redis-1 | 1:C 08 Mar 2025 22:48:05.223 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just st
arted
redis-1 | 1:C 08 Mar 2025 22:48:05.223 * Configuration loaded
redis-1 | 1:M 08 Mar 2025 22:48:05.224 * monotonic clock: POSIX clock_gettime
redis-1 | 1:M 08 Mar 2025 22:48:05.224 * Running mode=standalone, port=6379.
redis-1 | 1:M 08 Mar 2025 22:48:05.225 * Server initialized
redis-1 | 1:M 08 Mar 2025 22:48:05.225 * Loading RDB produced by version 7.4.2
redis-1 | 1:M 08 Mar 2025 22:48:05.225 * RDB age 65 seconds
redis-1 | 1:M 08 Mar 2025 22:48:05.225 * RDB memory usage when created 1.02 Mb
redis-1 | 1:M 08 Mar 2025 22:48:05.231 * Done loading RDB, keys loaded: 1, keys expired: 0.
redis-1 | 1:M 08 Mar 2025 22:48:05.231 * DB loaded from disk: 0.007 seconds
redis-1 | 1:M 08 Mar 2025 22:48:05.231 * 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 s
erver 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: 227-445-332
webapp-1 | 127.0.0.1 - - [08/Mar/2025 22:48:20] "GET / HTTP/1.1" 200 -
redis-1 | 1:M 08 Mar 2025 22:48:20.626 * 1 changes in 5 seconds. Saving...
redis-1 | 1:M 08 Mar 2025 22:48:20.627 * Background saving started by pid 11
redis-1 | 11:C 08 Mar 2025 22:48:20.629 * DB saved on disk
redis-1 | 11:C 08 Mar 2025 22:48:20.630 * Fork CoW for RDB: current 0 MB, peak 0 MB, average 0 MB
redis-1 | 1:M 08 Mar 2025 22:48:20.728 * Background saving terminated with success

```

Enable Watch

```
vagrant@svr2425-docker:/vagrant/ej4$ docker compose -f compose.yml up -d
[+] Running 2/2
  ✓ Container ej4-redis-1 Started           0.2s
  ✓ Container ej4-webapp-1 Started          0.3s
vagrant@svr2425-docker:/vagrant/ej4$ docker compose -f compose.yml ps
NAME                IMAGE              COMMAND                SERVICE    CREATED         STATUS             PORTS
ej4-redis-1         svr2425-redis-multi "redis-server --prot..." redis      4 minutes ago   Up 11 seconds      6379/tcp
ej4-webapp-1        svr2425-web       "flask run"            webapp     4 minutes ago   Up 10 seconds (health: starting) 0.0.0.0:8080->5000/tcp, [::]:8080->5000/tcp
vagrant@svr2425-docker:/vagrant/ej4$ docker ps
CONTAINER ID   IMAGE              COMMAND                CREATED         STATUS             PORTS                NAMES
8efe86af4851   svr2425-web       "flask run"            4 minutes ago   Up 28 seconds (healthy) 0.0.0.0:8080->5000/tcp, [::]:8080->5000/tcp  ej4-webapp-1
c53be846de38   svr2425-redis-multi "redis-server --prot..." 4 minutes ago   Up 28 seconds      6379/tcp              ej4-redis-1
vagrant@svr2425-docker:/vagrant/ej4$ curl -s http://localhost | grep "Redis counter"
vagrant@svr2425-docker:/vagrant/ej4$ curl -s http://localhost:8080 | grep "Redis counter"
<p>New New Redis counter: <span style="color: green;">39</span></p>
vagrant@svr2425-docker:/vagrant/ej4$
vagrant@svr2425-docker:/vagrant/ej4$ sed -i 's/Redis counter/New Redis counter/g' /vagrant/ej4/src/templates/index.html
vagrant@svr2425-docker:/vagrant/ej4$
vagrant@svr2425-docker:/vagrant/ej4$ curl -s http://localhost:8080 | grep "Redis counter"
<p>New New New Redis counter: <span style="color: green;">46</span></p>
vagrant@svr2425-docker:/vagrant/ej4$
```

E6:

```
vagrant@svr2425-docker:/vagrant/ej4$ docker stack ls
NAME                SERVICES
svr2425-stack       2
vagrant@svr2425-docker:/vagrant/ej4$ docker stack services svr2425-stack
ID                NAME                MODE                REPLICAS    IMAGE                PORTS
ln4kgqth8og      svr2425-stack_redis replicated          1/1          localhost:5000/svr2425-redis-multi:latest
nlsjkrzealjv     svr2425-stack_webapp replicated          3/3          localhost:5000/svr2425-web:latest      *:8080->5000/tcp
vagrant@svr2425-docker:/vagrant/ej4$ docker stack ps svr2425-stack
ID                NAME                IMAGE                NODE                DESIRED STATE    CURRENT STATE    ERROR                PORTS
964ombtlu6og      svr2425-stack_redis.1 localhost:5000/svr2425-redis-multi:latest svr2425-docker-worker Running           Running about a minute ago
nwzdu8jgnuf0     svr2425-stack_webapp.1 localhost:5000/svr2425-web:latest          svr2425-docker   Running           Running about a minute ago
tvmvwnq4w5ke     svr2425-stack_webapp.2 localhost:5000/svr2425-web:latest          svr2425-docker-worker Running           Running about a minute ago
zwa92fwmortx     svr2425-stack_webapp.3 localhost:5000/svr2425-web:latest          svr2425-docker   Running           Running about a minute ago
vagrant@svr2425-docker:/vagrant/ej4$ docker ps
CONTAINER ID        IMAGE                COMMAND              CREATED            STATUS              PORTS              NAMES
7b9bb87fcb1c      localhost:5000/svr2425-web:latest "flask run"         About a minute ago Up About a minute (healthy) 5000/tcp            svr2425-stack_webapp.3.zwa92fwmortxyahc06qtuxyum
26bd98eaid13      localhost:5000/svr2425-web:latest "flask run"         About a minute ago Up About a minute (healthy) 5000/tcp            svr2425-stack_webapp.1.nwzdu8jgnuf007njag9yh68ek
16ad07f70614      registry:2.8.3      "/entrypoint.sh /etc..." 5 minutes ago      Up 5 minutes        5000/tcp            registry.1.uwH01siBoelbxtC786ygsikf5
vagrant@svr2425-docker:/vagrant/ej4$
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS
87ff13937612b	localhost:5000/svr2425-web:latest	"flask run"	About a minute ago	Up About a minute (healthy)
10567c059a49	localhost:5000/svr2425-web:latest	"flask run"	About a minute ago	Up About a minute (healthy)
	5000/tcp	svr2425-stack_webapp.1		
	5000/tcp	svr2425-stack_webapp.3		

```
vagrant@svr2425-docker:/vagrant/ej4$ docker stack services svr2425-stack
ID                NAME                MODE                REPLICAS    IMAGE                PORTS
ln4kgqth8og      svr2425-stack_redis replicated          1/1          localhost:5000/svr2425-redis-multi:latest
nlsjkrzealjv     svr2425-stack_webapp replicated          3/3          localhost:5000/svr2425-web:latest      *:8080->5000/tcp
vagrant@svr2425-docker:/vagrant/ej4$ docker service scale svr2425-stack_webapp=4
svr2425-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 svr2425-stack_webapp converged
vagrant@svr2425-docker:/vagrant/ej4$ docker stack services svr2425-stack
ID                NAME                MODE                REPLICAS    IMAGE                PORTS
ln4kgqth8og      svr2425-stack_redis replicated          1/1          localhost:5000/svr2425-redis-multi:latest
nlsjkrzealjv     svr2425-stack_webapp replicated          4/4          localhost:5000/svr2425-web:latest      *:8080->5000/tcp
vagrant@svr2425-docker:/vagrant/ej4$ docker stack ps mystack
nothing found in stack: mystack
vagrant@svr2425-docker:/vagrant/ej4$ docker stack ps svr2425-stack
ID                NAME                IMAGE                NODE                DESIRED STATE    CURRENT STATE    ERROR                PORTS
964ombtlu6og      svr2425-stack_redis.1 localhost:5000/svr2425-redis-multi:latest svr2425-docker-worker Running           Running 20 minutes ago
8byx0z5u4e0d     svr2425-stack_webapp.1 localhost:5000/svr2425-web:latest          svr2425-docker   Running           Running 7 minutes ago
nwzdu8jgnuf0     \_svr2425-stack_webapp.1 localhost:5000/svr2425-web:latest          svr2425-docker   Shutdown          Failed 7 minutes ago "task: non-zero exit (137)"
tvmvwnq4w5ke     svr2425-stack_webapp.2 localhost:5000/svr2425-web:latest          svr2425-docker-worker Running           Running 20 minutes ago
zwa92fwmortx     svr2425-stack_webapp.3 localhost:5000/svr2425-web:latest          svr2425-docker   Running           Running 20 minutes ago
6ss7evgwjupy     svr2425-stack_webapp.4 localhost:5000/svr2425-web:latest          svr2425-docker-worker Running           Running 51 seconds ago
vagrant@svr2425-docker:/vagrant/ej4$ docker service scale svr2425-stack_webapp=2
svr2425-stack_webapp scaled to 2
overall progress: 2 out of 2 tasks
1/2: running [=====]
2/2: running [=====]
verify: Service svr2425-stack_webapp converged
vagrant@svr2425-docker:/vagrant/ej4$ docker stack services svr2425-stack
ID                NAME                MODE                REPLICAS    IMAGE                PORTS
ln4kgqth8og      svr2425-stack_redis replicated          1/1          localhost:5000/svr2425-redis-multi:latest
nlsjkrzealjv     svr2425-stack_webapp replicated          2/2          localhost:5000/svr2425-web:latest      *:8080->5000/tcp
vagrant@svr2425-docker:/vagrant/ej4$
```

E7:

```
vagrant@svr2425-docker:~$ docker service ls
ID                NAME      MODE     REPLICAS  IMAGE                                  PORTS
k052pq6u353a     webapp    replicated 5/5        localhost:5000/svr2425-web:latest    *:80->5000/tcp
vagrant@svr2425-docker:~$ docker service ps webapp
ID                NAME      IMAGE                                  NODE             DESIRED STATE  CURRENT STATE      ERROR          PORTS
5mi80hxfjcr      redis.1   localhost:5000/svr2425-redis-multi:latest  svr2425-docker  Running        Running 3 minutes ago
slgbqu0cq0p9     webapp.1  localhost:5000/svr2425-web:latest          svr2425-docker  Running        Running 2 minutes ago
polh8xu7tn0l     webapp.2  localhost:5000/svr2425-web:latest          svr2425-docker  Running        Running 2 minutes ago
3au5c6wj8grc     webapp.3  localhost:5000/svr2425-web:latest          svr2425-docker  Running        Running 2 minutes ago
tlcnx2ux1ly1     webapp.4  localhost:5000/svr2425-web:latest          svr2425-docker  Running        Running 2 minutes ago
3ydt3lig0vbf     webapp.5  localhost:5000/svr2425-web:latest          svr2425-docker  Running        Running 2 minutes ago
vagrant@svr2425-docker:~$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED          STATUS              PORTS              NAMES
e8e925e2c277   localhost:5000/svr2425-web:latest   "flask run"            2 minutes ago   Up 2 minutes (healthy)  5000/tcp            webapp.5.3ydt3lig0vbfrrtgribfoh35s
4f22198710ca   localhost:5000/svr2425-web:latest   "flask run"            2 minutes ago   Up 2 minutes (healthy)  5000/tcp            webapp.4.tlcnx2ux1ly1l93rja3bk89v4
135b03e90c83   localhost:5000/svr2425-web:latest   "flask run"            2 minutes ago   Up 2 minutes (healthy)  5000/tcp            webapp.3.3au5c6wj8grcit3xwq7wzkzgf
42ff31c22d39   localhost:5000/svr2425-web:latest   "flask run"            2 minutes ago   Up 2 minutes (healthy)  5000/tcp            webapp.1.slgbqu0cq0p9ijlwq8yqecbs
cb5647ee590d   localhost:5000/svr2425-web:latest   "flask run"            2 minutes ago   Up 2 minutes (healthy)  5000/tcp            webapp.2.polh8xu7tn0l7dnq8ozwmzje1
fa7371cdd2db   localhost:5000/svr2425-redis-multi:latest "redis-server --prot..." 3 minutes ago     Up 3 minutes        6379/tcp           redis.1.5mi80hxfjcrritui89hd8gvv
vagrant@svr2425-docker:~$
```

```
vagrant@svr2425-docker:~$ docker service inspect --pretty webapp
```

```
ID:                k052pq6u353a96wrsvqpt7dof
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/svr2425-web:latest
  Init:            false
Mounts:
  Target:          /src
  Source:          /vagrant/ej4/src
  ReadOnly:        false
  Type:            bind
Resources:
Networks: my-overlay-net
Endpoint Mode: vip
Ports:
  PublishedPort = 80
  Protocol = tcp
  TargetPort = 5000
  PublishMode = ingress
```

```
vagrant@svr2425-docker:~$ curl -s localhost | grep "Redis counter"
```

```
<p>New New New Redis counter: <span style="color: red;">N/A</span></p>
```

```
vagrant@svr2425-docker:~$
```

← → ↻ Not Secure svr2425-docker

GEI AISI: 2024/2025

Flask+Redis WebApp (Docker)

Página web de Sergio Vila Riveira

URL: <http://svr2425-docker/>

Sun Mar 09 2025 21:05:54 GMT+0100 (Central European Standard Time)

Redis container: redis

Redis connection status: PASSED

New New New Redis counter: 149

Web Server IP: 10.0.0.176 | Client IP: 10.0.0.2

← → ↻ Not Secure svr2425-docker

GEI AISI: 2024/2025

Flask+Redis WebApp (Docker)

Página web de Sergio Vila Riveira

URL: <http://svr2425-docker/>

Sun Mar 09 2025 21:07:30 GMT+0100 (Central European Standard Time)

Redis container: redis

Redis connection status: PASSED

New New New Redis counter: 165

Web Server IP: 10.0.0.178 | Client IP: 10.0.0.2