Rendu lab30

Existing volumes:

1.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker run --name couchdb -d -p 5984:5984 couchdb:2.1
af7fc18dda57f81c4c0008d1e3eaab10cd3b796862cb7097c3789708b577fa0a
```

2.

Car Docker crée automatiquement un **volume anonyme** et l'attache à

`/opt/couchdb/data` pour persister les données.

3.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker inspect couchdb --format '{{ json .Mounts }}' | ConvertFrom-Json


Type        : volume
Name        : 6cfbc10072c863d0ac0fef96f270dfa08b39711188581289c68ff38777e997d3
Source      : /var/lib/docker/volumes/6cfbc10072c863d0ac0fef96f270dfa08b39711188581289c68ff38777e997d3/_data
Destination : /opt/couchdb/data
Driver      : local
Mode        :
RW          : True
Propagation :
```

4/5..

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker run -it --rm -v 9ec7...:/data busybox sh
/ # ls /data
/ # exit
```

6/7.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker stop couchdb
couchdb
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker rm couchdb
couchdb
```

8.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker volume rm  6cfbc10072c863d0ac0fef96f270dfa08b39711188581289c68ff38777e997d3
6cfbc10072c863d0ac0fef96f270dfa08b39711188581289c68ff38777e997d3
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker inspect couchdb --format '{{ json .Mounts }}' | ConvertFrom-Json
Error: No such object: couchdb
```

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker volume ls
DRIVER      VOLUME NAME
local       4ffd71da3382bc929856015f74ff906944f63403bf117786ef3726bbe6c4ef3f
local       8d4afddfd0485a7e1dff5cc83b211db8c82bcfa6d7fb404960109d8a5e591128
local       9ec72533abf10f1c0fb591264d91ab07363e3c6814befdedec87e97f3f2d6159
local       020a079adec03a2fe7b2c3bd87f2274dbf04f41512f50346e6b8ef3ba8a35de0
local       78b92aa0e1eff10078611dd32214d2e3f21b9f8166010159cb22a1198a8ec9fc
local       4481db00cf4a620baac6c254bb160fa849a306cecc9927a582844a0d65a663ed
local       a45d43f6124df2d893df045a6040828f0a66fed52413318263627ca77c84f477
local       c8e2838ccdf9f020a6b1bd91ded6b93a8f9344aa740098a00079461048c05c38
local       cab77c4d7f30fb323d873f5a8d976cc5cfc9279b6fd04559332280f2ae005f16
local       d4512648ff9f79b6d16626c521a0859d1522fd45a4300990f442a5c61e12e6ea
local       s6-ressources_database
```

Named volume:

1.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker volume create couchdb_vol
couchdb_vol
```

2.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker run --name couchdb -d -p 5984:5984 -v couchdb_vol:/opt/couchdb/data couchdb:2.1
60c520d694645b3362c70011eb509a7009655b2d814dd67710f0d061915ddf44
```

3.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker inspect couchdb --format '{{ json .Mounts }}' | ConvertFrom-Json


Type        : volume
Name        : couchdb_vol
Source      : /var/lib/docker/volumes/couchdb_vol/_data
Destination : /opt/couchdb/data
Driver      : local
Mode        : z
RW          : True
Propagation :
```

Mount directory

1/2

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker run -it --rm -v couchdb_vol:/opt/couchdb/data busybox sh
/ # ls /opt/couchdb/data
_dbs.couch        _nodes.couch        _replicator.couch  _users.couch
/ # exit
```

SideCar Pattern

1.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> mkdir sidecar


    Répertoire : C:\Users\omar\ESGI-4IABD-janvier-2025


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----         28/08/2025     09:53                sidecar
```

2.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker run -d --name gen_date -v ${PWD}/sidecar:/dck busybox sh -c "while true; do date >> /d
ck/date.log; sleep 1; done"
fba8e8a6165b8dcd792b4d195b0c419389ae7952db1d9de8c045931945b92dad
```

3.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> Get-Content .\sidecar\date.log
Thu Aug 28 07:53:18 UTC 2025
Thu Aug 28 07:53:19 UTC 2025
Thu Aug 28 07:53:20 UTC 2025
Thu Aug 28 07:53:21 UTC 2025
Thu Aug 28 07:53:22 UTC 2025
Thu Aug 28 07:53:23 UTC 2025
Thu Aug 28 07:53:24 UTC 2025
Thu Aug 28 07:53:25 UTC 2025
Thu Aug 28 07:53:26 UTC 2025
Thu Aug 28 07:53:27 UTC 2025
Thu Aug 28 07:53:28 UTC 2025
Thu Aug 28 07:53:29 UTC 2025
```

4/5/6.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker run -it --rm -v ${PWD}/sidecar:/dck2 busybox tail -f /dck2/date.log
Thu Aug 28 07:53:28 UTC 2025
Thu Aug 28 07:53:29 UTC 2025
Thu Aug 28 07:53:30 UTC 2025
Thu Aug 28 07:53:31 UTC 2025
Thu Aug 28 07:53:32 UTC 2025
Thu Aug 28 07:53:33 UTC 2025
Thu Aug 28 07:53:34 UTC 2025
Thu Aug 28 07:53:35 UTC 2025
Thu Aug 28 07:53:36 UTC 2025
Thu Aug 28 07:53:37 UTC 2025
Thu Aug 28 07:53:38 UTC 2025
Thu Aug 28 07:53:39 UTC 2025
Thu Aug 28 07:53:40 UTC 2025
Thu Aug 28 07:53:41 UTC 2025
Thu Aug 28 07:53:42 UTC 2025
Thu Aug 28 07:53:43 UTC 2025
Thu Aug 28 07:53:44 UTC 2025
Thu Aug 28 07:53:45 UTC 2025
Thu Aug 28 07:53:46 UTC 2025
Thu Aug 28 07:53:47 UTC 2025
Thu Aug 28 07:53:48 UTC 2025
Thu Aug 28 07:53:49 UTC 2025
Thu Aug 28 07:53:50 UTC 2025
Thu Aug 28 07:53:51 UTC 2025
Thu Aug 28 07:53:52 UTC 2025
Thu Aug 28 07:53:53 UTC 2025
Thu Aug 28 07:53:54 UTC 2025
Thu Aug 28 07:53:55 UTC 2025
```

7.

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker kill gen_date
gen_date
```

Le conteneur s'arrête car son seul process (la boucle `while true`) est tué , sans process principal un conteneur ne peut pas rester en vie.

In memory:

```
PS C:\Users\omar\ESGI-4IABD-janvier-2025> docker run -it --rm --tmpfs /test busybox sh
/ # mount | grep test
tmpfs on /test type tmpfs (rw,nosuid,nodev,noexec,relatime)
/ # exit
PS C:\Users\omar\ESGI-4IABD-janvier-2025>
```