Universidad LATINA

LAUREATE INTERNATIONAL UNIVERSITIES®

LABORATORIO CONTENEDORES

BIT-28 Sistemas Operativos II

Escuela de Ingeniería en Software
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Instalación del Docker:

```
● docker.service - Docker Application Container Engine
     Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
     Active: active (running) since Wed 2024-11-13 03:28:14 UTC; 3min 9s ago
TriggeredBy: ● docker.socket
       Docs: https://docs.docker.com
   Main PID: 15607 (dockerd)
      Tasks: 8
     Memory: 20.4M
        CPU: 1.358s
     CGroup: /system.slice/docker.service
             └─15607 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

nov 13 03:28:12 pau dockerd[15607]: time="2024-11-13T03:28:12.227212219Z" level=info msg="Starting up"
nov 13 03:28:12 pau dockerd[15607]: time="2024-11-13T03:28:12.231238749Z" level=info msg="detected 127.0.0.53 nameserver, assuming systemd-resolved, so using r>
nov 13 03:28:12 pau dockerd[15607]: time="2024-11-13T03:28:12.503846466Z" level=info msg="Loading containers: start."
nov 13 03:28:13 pau dockerd[15607]: time="2024-11-13T03:28:13.870168033Z" level=info msg="Loading containers: done."
nov 13 03:28:13 pau dockerd[15607]: time="2024-11-13T03:28:13.929704472Z" level=warning msg="WARNING: bridge-nf-call-iptables is disabled"
nov 13 03:28:13 pau dockerd[15607]: time="2024-11-13T03:28:13.930400725Z" level=warning msg="WARNING: bridge-nf-call-ip6tables is disabled"
nov 13 03:28:13 pau dockerd[15607]: time="2024-11-13T03:28:13.930618389Z" level=info msg="Docker daemon" commit=41ca978 containerd-snapshotter=false storage-dr>
nov 13 03:28:13 pau dockerd[15607]: time="2024-11-13T03:28:13.931198172Z" level=info msg="Daemon has completed initialization"
nov 13 03:28:14 pau dockerd[15607]: time="2024-11-13T03:28:14.129206390Z" level=info msg="API listen on /run/docker.sock"
nov 13 03:28:14 pau systemd[1]: Started Docker Application Container Engine.
~
```

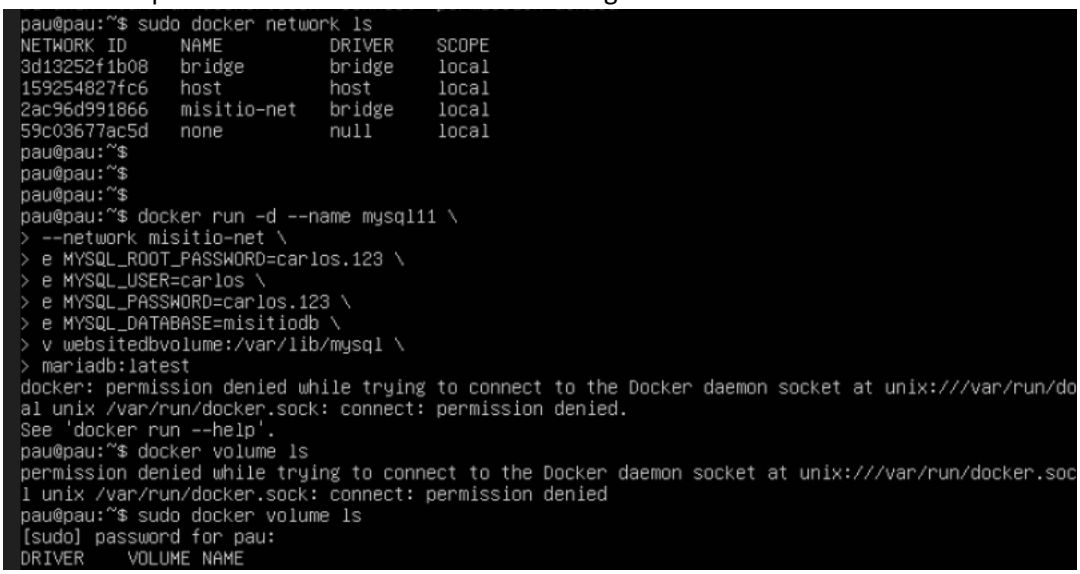
Hello WORLD Docker:

```
pau@pau:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
c1ec31eb5944: Pull complete
Digest: sha256:d211f485f2dd1dee407a80973c8f129f00d54604d2c90732e8e320e5038a0348
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/

pau@pau:~$
```

Red exclusiva “misitio-net”

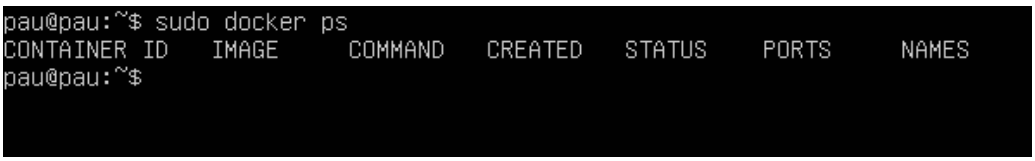
```
pau@pau:~$ docker network create misitio=net
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "h
/var/run/docker.sock: connect: permission denied
pau@pau:~$ sudo docker network create misitio-net
2ac96d9918662386537639ca341e6e0b0a55022b84ada771c93a2ad3cfacdc73
pau@pau:~$ docker network ls
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "ht
al unix /var/run/docker.sock: connect: permission denied
pau@pau:~$ sudo docker network create misitio-net
Error response from daemon: network with name misitio-net already exists
pau@pau:~$ docker network ls
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "ht
al unix /var/run/docker.sock: connect: permission denied
pau@pau:~$ sudo docker network ls
NETWORK ID     NAME          DRIVER    SCOPE
8d13252f1b08   bridge        bridge    local
159254827fc6   host          host      local
2ac96d991866   misitio-net   bridge    local
59c03677ac5d   none          null      local
pau@pau:~$ _
```

Contenedor para la base de datos utilizando la imagen de MariaDB.



Contenedor servicio web.

Verificamos los contenedores en ejecución:



Instalar docker-composer V1

```
pau@pau:~$ sudo curl-L "https://github.com/docker/compose/releases/download/1.29.2/dock
uname-s: command not found
uname-m: command not found
sudo: curl-L: command not found
pau@pau:~$ sudo curl-L "https://github.com/docker/compose/releases/download/1.29.2/dock
uname-s: command not found
uname-m: command not found
sudo: curl-L: command not found
pau@pau:~$ sudo chmod +x/usr/local/bin/docker-compose
chmod: missing operand after ‘+x/usr/local/bin/docker-compose’
Try 'chmod --help' for more information.
pau@pau:~$ docker-compose --version
Command 'docker-compose' not found, but can be installed with:
sudo snap install docker          # version 24.0.5, or
sudo apt  install docker-compose  # version 1.29.2-1
See 'snap info docker' for additional versions.
pau@pau:~$
```

snap info docker:

```
contact:   https://github.com/docker-snap/docker-snap/issues?q=
license:   Apache-2.0 AND GPL-2.0 AND MIT
description: |
  Build and run container images with Docker.

  **Usage**

  * This build can only access files in the home directory. So Dockerfiles and all other files used
  in commands like `docker build`, `docker save` and `docker load` need to be in $HOME.
  * You can change the configuration of this build by modifying the files in
  `/var/snap/docker/current/`.
  * Additional certificates used by the Docker daemon to authenticate with registries need to be
  added in `/var/snap/docker/current/etc/docker/certs.d` (instead of `/etc/docker/certs.d`). This
  directory can be accessed by other snaps using the `docker-registry-certificates` content
  interface.

  **Running Docker as normal user**

  By default, Docker is only accessible with root privileges (`sudo`). If you want to use docker as
  a regular user, you need to add your user to the `docker` group.

      sudo addgroup --system docker
      sudo adduser $USER docker
      newgrp docker
      sudo snap disable docker
      sudo snap enable docker

  **Warning:** if you add your user to the `docker` group, it will have similar power as the `root`
  user. For details on how this impacts security in your system, see
  https://docs.docker.com/engine/security/#docker-daemon-attack-surface

  **Authors**

  This snap is built by Canonical based on source code published by Docker, Inc. It is not endorsed
  or published by Docker, Inc.

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  States and/or other countries. Docker, Inc. and other parties may also have trademark rights in
  other terms used herein.
snap-id: sLCsFAO8PKM5ZOfAKNszUOX0YASjQfeZ
channels:
  latest/stable:    24.0.5   2024-09-03 (2932) 138MB -
  latest/candidate: 27.2.0   2024-11-08 (2963) 146MB -
  latest/beta:      27.2.0   2024-09-19 (2963) 146MB -
  latest/edge:      27.2.0   2024-09-20 (2969) 146MB -
  core18/stable:    20.10.17 2023-03-13 (2746) 146MB -
  core18/candidate: ↑
  core18/beta:      ↑
  core18/edge:      ↑
pau@pau:~$ _
```