

P6. Contenedores con Docker

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DevOps

2º DAM

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1. Instalación imágenes

```
PS C:\Users\ivann> docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
103f50cb3e9f: Download complete
513c3649bb14: Download complete
7cf63256a31a: Download complete
bf9acace214a: Download complete
9dd21ad5a4a6: Download complete
d014f92d532d: Download complete
943ea0f0c2e4: Download complete
Digest: sha256:9d6b58feebd2dbd3c56ab5853333d627cc6e281011cfd6050fa4bcf2072c9496
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
```

```
PS C:\Users\ivann> docker pull phpmyadmin
Using default tag: latest
latest: Pulling from library/phpmyadmin
859c077b5003: Pulling fs layer
541e8b2b93f3: Pulling fs layer
ee6fbc7f6010: Pulling fs layer
455fc339a53b: Pulling fs layer
59e01f001c00: Pulling fs layer
7ac282ed1b18: Pulling fs layer
5b3467e0601d: Pulling fs layer
9e27623ff1e4: Pulling fs layer
db2285789b90: Pulling fs layer
a02f50ccc1f1: Pulling fs layer
59e01f001c00: Download complete
4f4fb700ef54: Already exists
7d7543348a2e: Download complete
e7c284386bd7: Download complete
7b3a864a341f: Download complete
ac27bee4c1: Download complete
fc8fb4479d84: Download complete
```

```
PS C:\Users\ivann> docker pull redis
Using default tag: latest
latest: Pulling from library/redis
056ff5d77b71: Download complete
40836d0aa8f0: Download complete
4f4fb700ef54: Already exists
a37a0a824c7e: Download complete
fc690ecf94f9: Download complete
c8c62be273bb: Download complete
d6c5e428cfd7: Download complete
Digest: sha256:6aafb7f25fc93c4ff74e99cff8e85899f03901bc96e61ba12cd3c39e95503c73
Status: Downloaded newer image for redis:latest
docker.io/library/redis:latest
```

```
PS C:\Users\ivann> docker pull rabbitmq
Using default tag: latest
latest: Pulling from library/rabbitmq
fd30aebf0283: Download complete
680633ae1d4e: Download complete
bbff533017be: Download complete
63542e0dcf41: Download complete
6e66834e4972: Download complete
fd39c0d93759: Download complete
548d91de6f99: Download complete
8358dec30aab: Download complete
Digest: sha256:052cf7d4105f5f24fd7a762c74a5140fd8731cffe28b9d949784391158b09d27
Status: Downloaded newer image for rabbitmq:latest
docker.io/library/rabbitmq:latest
```

La instalación de phpmyadmin y mysql ya la tengo instaladas

<input type="checkbox"/>	<input type="radio"/>	postgres	latest	0321e2252ebf	10 days ago	620.6 MB	▶	:	🗑
<input type="checkbox"/>	<input type="radio"/>	mysql	latest	146682692a3a	1 month ago	1.08 GB	▶	:	🗑
<input type="checkbox"/>	<input type="radio"/>	mongo	latest	aaad67f2dca9	3 months ago	1.17 GB	▶	:	🗑
<input type="checkbox"/>	<input type="radio"/>	nginx	latest	9d6b58feebd2	21 days ago	278.64 MB	▶	:	🗑
<input type="checkbox"/>	<input type="radio"/>	phpmyadmin	latest	fe8e5b08cba6	1 month ago	813.17 MB	▶	:	🗑
<input type="checkbox"/>	<input type="radio"/>	redis	latest	6aafb7f25fc9	2 months ago	172.78 MB	▶	:	🗑
<input type="checkbox"/>	<input type="radio"/>	rabbitmq	latest	052cf7d4105f	15 days ago	357.3 MB	▶	:	🗑
<input type="checkbox"/>	<input type="radio"/>	rabbitmq	management	c2f5153a7759	5 months ago	409.81 MB	▶	:	🗑

2. instalación individual

```
PS C:\Users\ivann> docker run -d --name nginx-server-devops -p 8080:80 nginx
>>
390515ff0f7173b0711e09fc2b364e272d605c2ca48e52235b680bce14edd49d
```

```
PS C:\Users\ivann> docker run -d --name mysql-db-devops -e MYSQL_ROOT_PASSWORD=EstoEsParaExamen -p 3306:3306 mysql:latest
>>
fffd78c7eaaa65332aba228d8dfa48691e5f494988f55134ec71e0e2b61917c34
```

```
PS C:\Users\ivann> docker run -d --name phpmyadmin-devops -e PMA_HOST=mysql-db-devops -p 8081:80 --link mysql-db phpmyadmin
>>
```

```
PS C:\Users\ivann> docker run -d --name redis-cache -p 6379:6379 redis
>>
c906032771454928d2d2ac6c94837c92fe1922530bc0db0c2a7fc19d43b3ec5b
```

```
PS C:\Users\ivann> docker run -d --name rabbitmq-server -p 5672:5672 -p 15672:15672 rabbitmq:management
>>
7541682595ab59346b9d0c13c08fdea9550228f02733401e3ad50dd0599a2c54
```

Se comprueba que este activos

ID	Container Name	Image	Created	Up	Down	Ports
5f0632b0e5c2	rabbitmq:management	"docker-entrypoint.s..."	About a minute ago	Up About a minute		4369/tcp, 5671/tcp, 0.0.0.0:5672->5672/tcp
p, 15671/tcp, 15691-15692/tcp, 25672/tcp, 0.0.0.0:15672->15672/tcp	rabbitmq-server-devops					
09a05fb1e702	redis	"docker-entrypoint.s..."	About a minute ago	Up About a minute		0.0.0.0:6379->6379/tcp
	redis-cache-devops					
fffd78c7eaaa6	mysql:latest	"docker-entrypoint.s..."	3 minutes ago	Up 6 seconds		0.0.0.0:3306->3306/tcp, 33060/tcp
	mysql-db-devops					
390515ff0f71	nginx	"/docker-entrypoint.s..."	3 minutes ago	Up 5 seconds		0.0.0.0:8080->80/tcp
	nginx-server-devops					

3. Configuración de un Docker compose

```
version: '3.8'

services:
  nginx:
    image: nginx
    container_name: nginx-server-devops
    ports:
      - "8080:80"
    restart: always

  mysql:
    image: mysql:latest
    container_name: mysql-db-devops
    environment:
      MYSQL_ROOT_PASSWORD: EstoEsParaExamen
    ports:
      - "3306:3306"
    restart: always

  phpmyadmin:
    image: phpmyadmin
    container_name: phpmyadmin-devops
    environment:
      PMA_HOST: mysql-db-devops
    ports:
      - "8081:80"
    restart: always
    depends_on:
      - mysql
```

```

redis:
  image: redis
  container_name: redis-cache-devops
  ports:
    - "6379:6379"
  restart: always

rabbitmq:
  image: rabbitmq:management
  container_name: rabbitmq-server-devops
  ports:
    - "5672:5672"
    - "15672:15672"
  restart: always

```

4. Instalación de container con Docker compose

```

D:\drive ivan\Curso DAM daw\UNIR\2_curso\DevOps\Actividades\DevOps_6_INR>docker-compose up -d
time="2025-02-26T14:17:16+01:00" level=warning msg="D:\drive ivan\Curso DAM daw\UNIR\2_curso\DevOps\Actividades\DevOps_6_INR\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 6/6
✔Network devops_6_inr_default      Created           0.2s
✔Container mysql-db-devops         Started          1.3s
✔Container rabbitmq-server-devops  Started          1.3s
✔Container redis-cache-devops      Started          1.1s
✔Container nginx-server-devops     Started          1.6s
✔Container phpmyadmin-devops       Started          1.3s

```

CONTAINER ID	IMAGE	NAMES	COMMAND	CREATED	STATUS	PORTS
d100ab829131	phpmyadmin	phpmyadmin-devops	"/docker-entrypoint..."	7 seconds ago	Up 6 seconds	0.0.0.0:8881->88/tcp
2eeafcc0b745	nginx	nginx-server-devops	"/docker-entrypoint..."	7 seconds ago	Up 6 seconds	0.0.0.0:8880->80/tcp
481a2ddcc9a4	redis	redis-cache-devops	"docker-entrypoint.s..."	7 seconds ago	Up 6 seconds	0.0.0.0:6379->6379/tcp
b8666a28b408	rabbitmq:management	rabbitmq-server-devops	"docker-entrypoint.s..."	7 seconds ago	Up 6 seconds	4369/tcp, 5671/tcp, 0.0.0.0:5672->5672/tcp, 15671/tcp, 15691-15692/tcp, 25672/tcp, 0.0.0.0:15672->15672/tcp
93fd9dd86ec3e	mysql:latest	mysql-db-devops	"docker-entrypoint.s..."	7 seconds ago	Up 6 seconds	0.0.0.0:3306->3306/tcp, 33060/tcp

```

D:\drive ivan\Curso DAM daw\UNIR\2_curso\DevOps\Actividades\DevOps_6_INR>docker-compose down
time="2025-02-26T14:17:41+01:00" level=warning msg="D:\drive ivan\Curso DAM daw\UNIR\2_curso\DevOps\Actividades\DevOps_6_INR\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 6/6
✔Container rabbitmq-server-devops  Removed          2.0s
✔Container nginx-server-devops    Removed          1.0s
✔Container phpmyadmin-devops      Removed          1.8s
✔Container redis-cache-devops     Removed          0.9s
✔Container mysql-db-devops        Removed          2.1s
✔Network devops_6_inr_default     Removed          0.7s
D:\drive ivan\Curso DAM daw\UNIR\2_curso\DevOps\Actividades\DevOps_6_INR>

```

5. Enlace

https://github.com/lvannunezrodriguez/DevOps_24-25/tree/c8b1b94c50b6c3446ad577ac4600484938f8ff79/Actividades/DevOps_6_INR