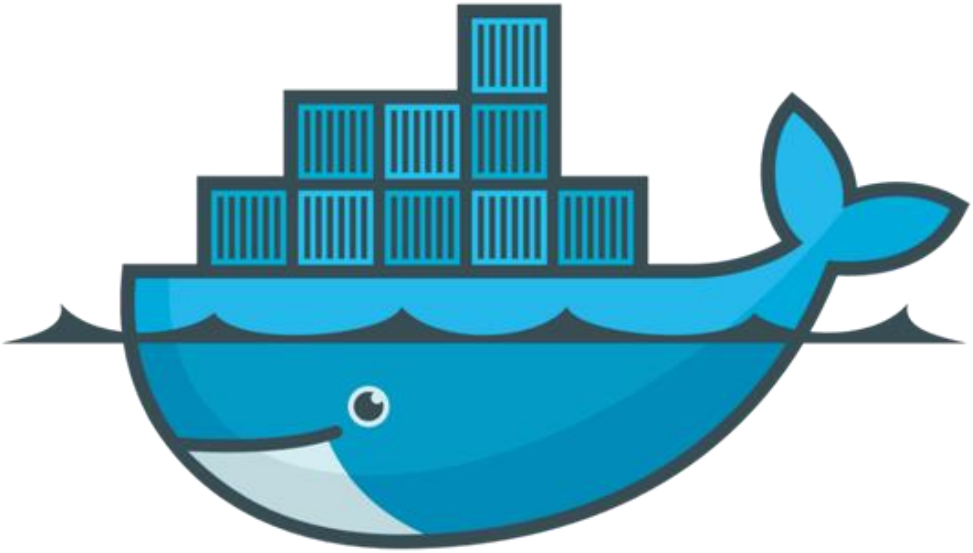
Tarea 2

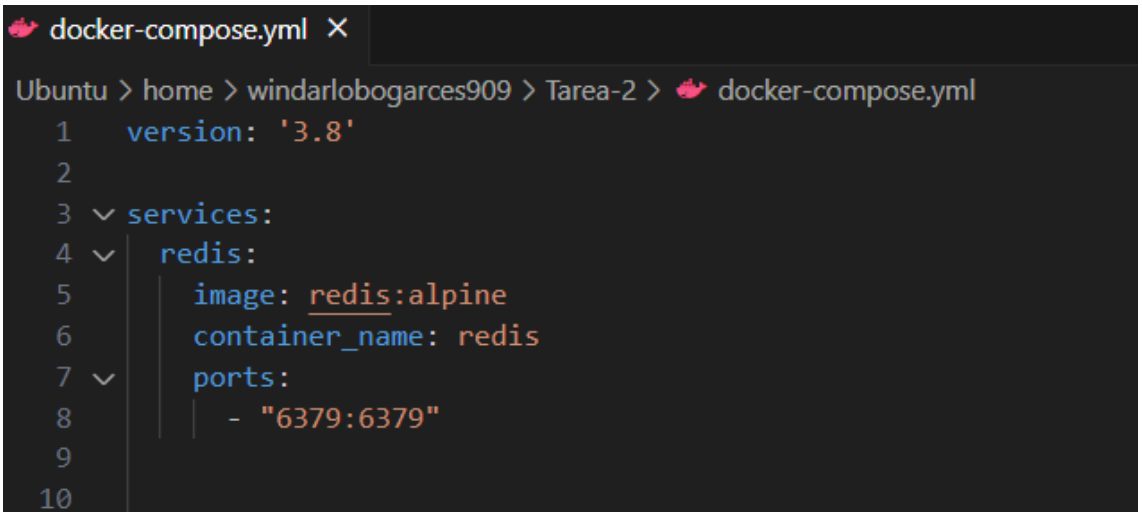
DAW - 23/24



docker

➢ Docker Compose

1. **Escribe el fichero docker-compose.yml que te permita levantar el stack compuesto por:**
    a. **Servicio redis**
        i. Imagen oficial de Redis (última versión de alpine)
        ii. Nombre del contenedor: redis
        iii. Puerto 63799 del host enlazado al estándar de Redis
        iv. Sin volúmenes enlazados



b. Servicio redisinsight:

i. Imagen oficial de RedisInsight (última versión de alpine)

ii. Nombre del contenedor: redisinsight

iii. Puerto 8111 del host enlazado al estándar de RedisInsight

iv. Volúmen administrado llamado redisinsight_data enlazado /db

```
redisinsight:
  image: redis/redisinsight:latest
  container_name: redisinsight
  ports:
    - "8111:5540"
  volumes:
    - redisinsight_data:/db
```

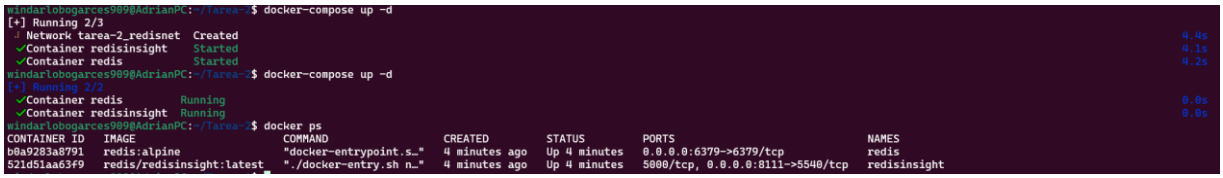
```
windarlobogarces909@AdrianPC:~/Tarea-2$ docker-compose up -d
[+] Running 12/12
 ✓redisinsight 11 layers [▒▒▒▒▒▒▒▒▒▒▒▒]      0B/0B      Pulled                                                59.8s
   ✓c926b61bad3b Pull complete                                                                            2.5s
   ✓3ebae63ae1d8 Pull complete                                                                           34.8s
   ✓4df6e7e40a3f Pull complete                                                                            3.7s
   ✓bd5b864d1249 Pull complete                                                                            4.3s
   ✓27ed6ad1b05c Pull complete                                                                            7.2s
   ✓121236a80296 Pull complete                                                                            5.5s
   ✓e0d5cb7579a4 Pull complete                                                                           26.5s
   ✓0388542db965 Pull complete                                                                            9.1s
   ✓0649c09437d1 Pull complete                                                                           10.7s
   ✓820436697ad8 Pull complete                                                                           11.8s
   ✓31a6cd9a7b95 Pull complete                                                                           14.0s
[+] Running 2/2
 ✓Container redisinsight  Started                                                                         2.5s
 ✓Container redis         Running                                                                         0.0s
windarlobogarces909@AdrianPC:~/Tarea-2$ ps
  PID TTY          TIME CMD
26025 pts/5    00:00:00 bash
27786 pts/5    00:00:00 ps
windarlobogarces909@AdrianPC:~/Tarea-2$ docker ps
CONTAINER ID   IMAGE                      COMMAND                  CREATED          STATUS          PORTS                                       NAMES
915dc88142b4   redis/redisinsight:latest  "./docker-entry.sh n…"   41 seconds ago   Up 38 seconds   5000/tcp, 0.0.0.0:8111->5540/tcp            redisinsight
a77be82c0b8e   redis:alpine               "docker-entrypoint.s…"   3 minutes ago    Up 3 minutes    0.0.0.0:6379->6379/tcp                      redis
windarlobogarces909@AdrianPC:~/Tarea-2$
```

c. **Ambos servicios deben estar unidos a una red custom llamada redisnet**

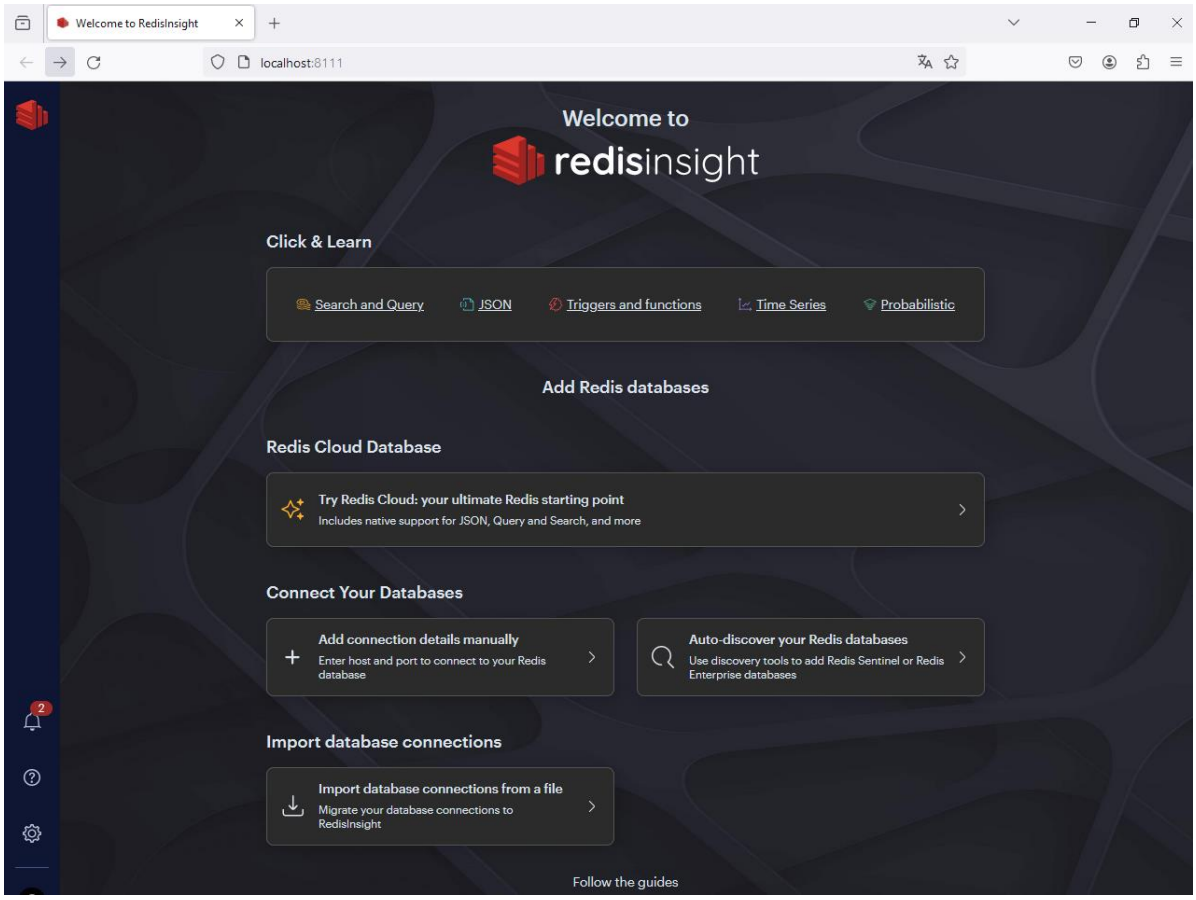
docker-compose.yml

Ubuntu > home > windarlobogarces909 > Tarea-2 > docker-compose.yml

```yaml
version: '3.8'

services:
  redis:
    image: redis:alpine
    container_name: redis
    ports:
      - "6379:6379"
    networks:
      - redisnet

  redisinsight:
    image: redis/redisinsight:latest
    container_name: redisinsight
    ports:
      - "8111:5540"
    volumes:
      - redisinsight_data:/db
    networks:
      - redisnet

networks:
  redisnet:
    driver: bridge

volumes:
  redisinsight_data:
    driver: local
```



2. **Accede a la URL http://localhost:8111 para validar que tienes acceso a la GUI del cliente Redis**



3. **pts) Sigue las instrucciones que te indica la web del cliente para conectarte al servidor redis. Sólo necesitas definir los campos Host, Port y Name (aquí puedes poner el que quieras, p.ej. demodb)**

Para poder saber el host del servidor redis, utilice este comando:

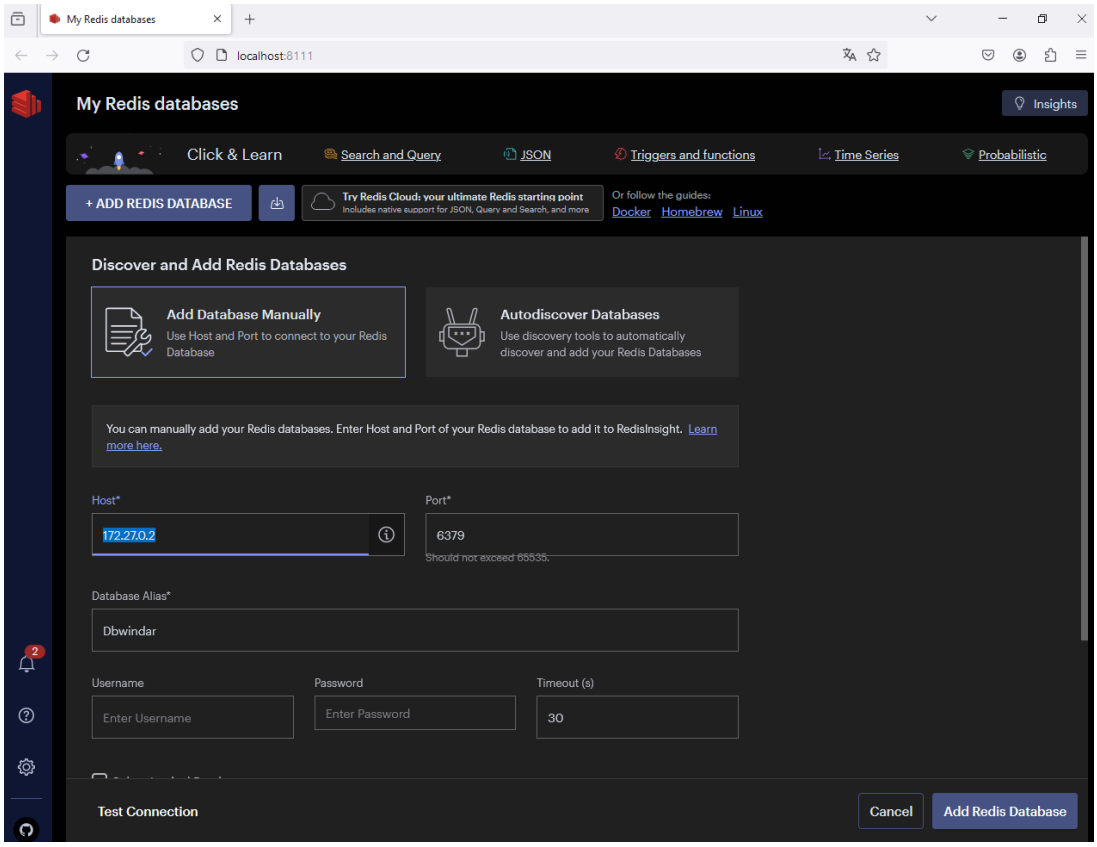
```
windarlobogarces909@AdrianPC:~/tarea-2$ docker inspect  redis
[
    {
        "Id": "b0a9283a8791b30cde89a1ae98df1d498439e70df8259539cfee8d1f14f53cfb",
        "Created": "2024-03-16T14:38:12.068928044Z",
        "Path": "docker-entrypoint.sh",
        "Args": [
            "redis-server"
        ],
        "State": {
            "Status": "running",
            "Running": true,
            "Paused": false,
            "Restarting": false,
            "OOMKilled": false,
            "Dead": false,
            "Pid": 5764,
            "ExitCode": 0,
            "Error": "",
            "StartedAt": "2024-03-16T14:38:16.188349241Z",
            "FinishedAt": "0001-01-01T00:00:00Z"
        },
        "Image": "sha256:435993df2c8d3a1508114cea2dd12ef4d6cbab5c7238bb8e587f20b18982c834",
        "ResolvConfPath": "/var/lib/docker/containers/b0a9283a8791b30cde89a1ae98df1d498439e70df8259539cfee8d1f14f53cfb/resolv.conf",
        "HostnamePath": "/var/lib/docker/containers/b0a9283a8791b30cde89a1ae98df1d498439e70df8259539cfee8d1f14f53cfb/hostname",
        "HostsPath": "/var/lib/docker/containers/b0a9283a8791b30cde89a1ae98df1d498439e70df8259539cfee8d1f14f53cfb/hosts",
        "LogPath": "/var/lib/docker/containers/b0a9283a8791b30cde89a1ae98df1d498439e70df8259539cfee8d1f14f53cfb/b0a9283a8791b30cde89a1ae98df1d498439e70df8259539cfee8d1f14f53cfb-json.log",
        "Name": "/redis",
        "RestartCount": 0,
        "Driver": "overlay2",
        "Platform": "linux",
        "MountLabel": "",
```

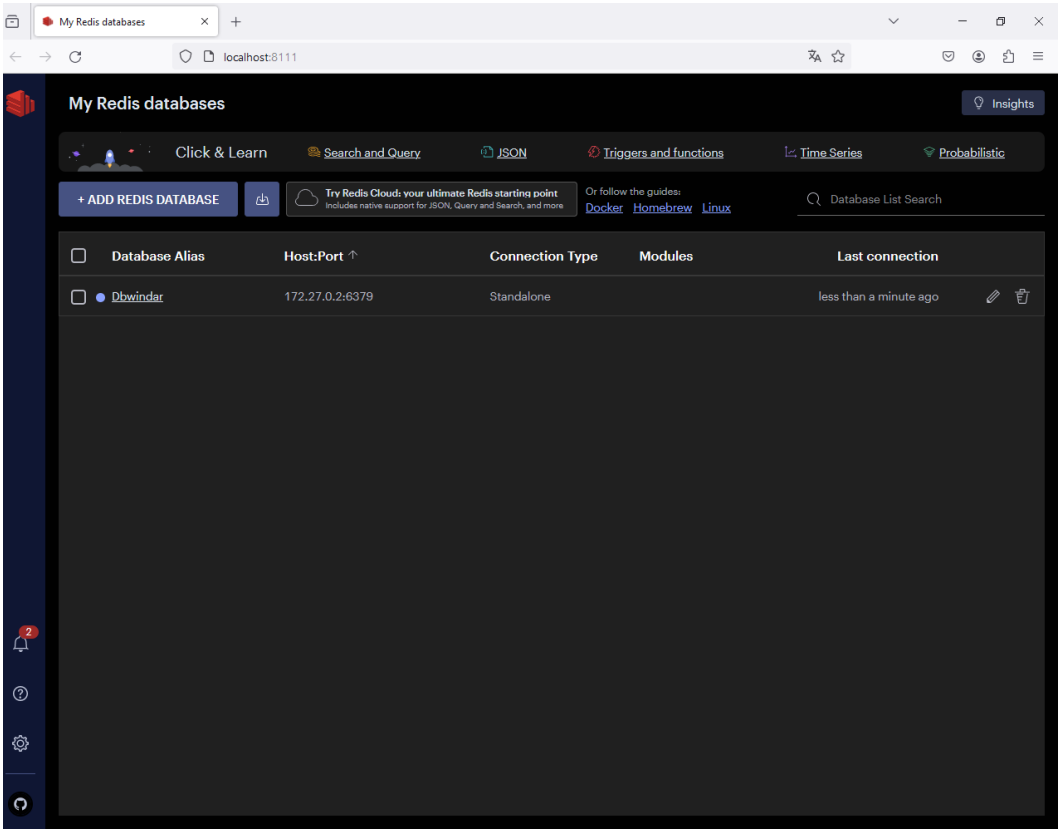
```
        "MountLabel": "",
        "ProcessLabel": "",
        "AppArmorProfile": "",
        "ExecIDs": null,
        "HostConfig": {
            "Binds": null,
            "ContainerIDFile": "",
            "LogConfig": {
                "Type": "json-file",
                "Config": {}
            },
            "NetworkMode": "tarea-2_redisnet",
            "PortBindings": {
                "6379/tcp": [
                    {
                        "HostIp": "",
                        "HostPort": "6379"
                    }
                ]
            },
            "RestartPolicy": {
                "Name": "no",
                "MaximumRetryCount": 0
            },
            "AutoRemove": false,
            "VolumeDriver": "",
            "VolumesFrom": null,
            "ConsoleSize": [
                0,
                0
            ],
            "CapAdd": null,
            "CapDrop": null,
            "CgroupnsMode": "host",
            "Dns": null,
            "DnsOptions": null,
            "DnsSearch": null,
            "ExtraHosts": [],
            "GroupAdd": null,
            "IpcMode": "private",
            "Cgroup": "",
            "Links": null,
            "OomScoreAdj": 0,
            "PidMode": "",
            "Privileged": false,
            "PublishAllPorts": false,
            "ReadonlyRootfs": false,
            "SecurityOpt": null,
            "UTSMode": "",
            "UsernsMode": "",
            "ShmSize": 67108864,
            "Runtime": "runc",
            "Isolation": "",
            "CpuShares": 0,
            "Memory": 0,
            "NanoCpus": 0,
            "CgroupParent": "",
            "BlkioWeight": 0,
            "BlkioWeightDevice": null,
            "BlkioDeviceReadBps": null,
            "BlkioDeviceWriteBps": null,
            "BlkioDeviceReadIOps": null,
            "BlkioDeviceWriteIOps": null,
            "CpuPeriod": 0,
            "CpuQuota": 0,
            "CpuRealtimePeriod": 0,
            "CpuRealtimeRuntime": 0,
            "CpusetCpus": "",
            "CpusetMems": "",
            "Devices": null,
            "DeviceCgroupRules": null,
            "DeviceRequests": null,
            "MemoryReservation": 0,
            "MemorySwap": 0,
            "MemorySwappiness": null,
            "OomKillDisable": false,
            "PidsLimit": null,
            "Ulimits": null,
            "CpuCount": 0,
            "CpuPercent": 0,
            "IOMaximumIOps": 0,
            "IOMaximumBandwidth": 0,
            "Mounts": [
                {
                    "Type": "volume",
                    "Source": "a9361fa6775e365364ac9cebd90bf6cf0f6ee75a10798bfc3a3e9fe1aab78328",
                    "Target": "/data"
                }
            ],
            "MaskedPaths": [
                "/proc/asound",
                "/proc/acpi",
                "/proc/kcore",
                "/proc/keys",
                "/proc/latency_stats",
                "/proc/timer_list",
                "/proc/timer_stats",
                "/proc/sched_debug",
                "/proc/scsi",
                "/sys/firmware",
                "/sys/devices/virtual/powercap"
            ],
            "ReadonlyPaths": [
                "/proc/bus",
                "/proc/fs",
                "/proc/irq",
                "/proc/sys",
                "/proc/sysrq-trigger"
            ]
        },
        "GraphDriver": {
            "Data": {
                "LowerDir": "/var/lib/docker/overlay2/c270e14f44964da06d3a9511cb45ffc0b51f90eaae423163ffd8e23c4f6802c7-init/diff:/var/lib/docker/overlay2/bc5556e01839a52d342926683eee353057200710985826f92b038bd10a7ae6dd/diff:/var/lib/docker/overlay2/a6281d9f16ef76f29f0ed0ebf24c5b5752a2723a974aa8a1870efc6fe8caaae6/diff:/var/lib/docker/overlay2/fec5a79aa240d3b66bbf338b7c51e2843ba591c6e687358a11ca251f4210ab0b7/diff:/var/lib/docker/overlay2/d3b41699208d23ec1787e4facd126e6ebec070879c7967f85ec302c7a1ec6462/diff:/var/lib/docker/overlay2/a945a9388757757979f9fbb8f860b61ee9ad51786ddc3c47576fd72bfab08c8da1/diff:/var/lib/docker/overlay2/2d96be083ca099ed47bc526434a953bb74372eaa9021788689ed66f7b3cd9bf0/diff:/var/lib/docker/overlay2/95462e8608f51b09e2f3398bc942b96cb9d27a739cc431c8b49a02e6e0b52228/diff:/var/lib/docker/overlay2/f2191cb5db7681c5f1041bbd5f88db26a413c0a81742a507078a587ad9e736af/diff",
                "MergedDir": "/var/lib/docker/overlay2/c270e14f44964da06d3a9511cb45ffc0b51f90eaae423163ffd8e23c4f6802c7/merged",
                "UpperDir": "/var/lib/docker/overlay2/c270e14f44964da06d3a9511cb45ffc0b51f90eaae423163ffd8e23c4f6802c7/diff",
                "WorkDir": "/var/lib/docker/overlay2/c270e14f44964da06d3a9511cb45ffc0b51f90eaae423163ffd8e23c4f6802c7/work"
            },
            "Name": "overlay2"
        },
        "Mounts": [
            {
                "Type": "volume",
                "Name": "a9361fa6775e365364ac9cebd90bf6cf0f6ee75a10798bfc3a3e9fe1aab78328",
                "Source": "/var/lib/docker/volumes/a9361fa6775e365364ac9cebd90bf6cf0f6ee75a10798bfc3a3e9fe1aab78328/_data",
                "Destination": "/data",
                "Driver": "local",
                "Mode": "z",
                "RW": true,
                "Propagation": ""
            }
        ],
        "Config": {
            "Hostname": "b0a9283a8791",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": true,
            "AttachStderr": true,
            "ExposedPorts": {
                "6379/tcp": {}
            },
            "Tty": false,
            "OpenStdin": false,
```

```
            "StdinOnce": false,
            "Env": [
                "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin",
                "GOSU_VERSION=1.17",
                "REDIS_VERSION=7.2.4",
                "REDIS_DOWNLOAD_URL=http://download.redis.io/releases/redis-7.2.4.tar.gz",
                "REDIS_DOWNLOAD_SHA=8d104c26a154b29fd67d6568b4f375212212ad41e0c2caa3d66480e78dbd3b59"
            ],
            "Cmd": [
                "redis-server"
            ],
            "Image": "redis:alpine",
            "Volumes": {
                "/data": {}
            },
            "WorkingDir": "/data",
            "Entrypoint": [
                "docker-entrypoint.sh"
            ],
            "OnBuild": null,
            "Labels": {
                "com.docker.compose.config-hash": "58a4df0ac0dc6015bc83207cbf3c63b69371ca107a0c88a00a686fc368580262",
                "com.docker.compose.container-number": "1",
                "com.docker.compose.depends_on": "",
                "com.docker.compose.image": "sha256:435993df2c8d3a1508114cea2dd12ef4d6cbab5c7238bb8e587f20b18982c834",
                "com.docker.compose.oneoff": "False",
                "com.docker.compose.project": "tarea-2",
                "com.docker.compose.project.config_files": "/home/windarlobogarces909/Tarea-2/docker-compose.yml",
                "com.docker.compose.project.working_dir": "/home/windarlobogarces909/Tarea-2",
                "com.docker.compose.replace": "a77be82c0b8e7367eacf686d9787aea1a68842ef8b23cb4554cd8fe6b553d927",
                "com.docker.compose.service": "redis",
                "com.docker.compose.version": "2.24.6",
                "desktop.docker.io/wsl-distro": "Ubuntu"
            }
        },
        "NetworkSettings": {
            "Bridge": "",
            "SandboxID": "3314cecfdd13a5ff5d9e5dc6eb7e6a5a264ee4511885a8a3611f84d97d89371c",
            "SandboxKey": "/var/run/docker/netns/3314cecfdd13",
            "Ports": {
                "6379/tcp": [
                    {
                        "HostIp": "0.0.0.0",
                        "HostPort": "6379"
                    }
                ]
            },
            "HairpinMode": false,
            "LinkLocalIPv6Address": "",
            "LinkLocalIPv6PrefixLen": 0,
```



```
            "HairpinMode": false,
            "LinkLocalIPv6Address": "",
            "LinkLocalIPv6PrefixLen": 0,
            "SecondaryIPAddresses": null,
            "SecondaryIPv6Addresses": null,
            "EndpointID": "",
            "Gateway": "",
            "GlobalIPv6Address": "",
            "GlobalIPv6PrefixLen": 0,
            "IPAddress": "",
            "IPPrefixLen": 0,
            "IPv6Gateway": "",
            "MacAddress": "",
            "Networks": {
                "tarea-2_redisnet": {
                    "IPAMConfig": null,
                    "Links": null,
                    "Aliases": [
                        "redis",
                        "b0a9283a8791"
                    ],
                    "MacAddress": "02:42:ac:1b:00:02",
                    "NetworkID": "44f1fc46214edf09284e270266a21bcb4ea75a7637e9fcc3edac37db76cfa377",
                    "EndpointID": "29e8028a7edf3344410d66da81893200d5ced023677dac521b6f8621acacbb99",
                    "Gateway": "172.27.0.1",
                    "IPAddress": "172.27.0.2",
                    "IPPrefixLen": 16,
                    "IPv6Gateway": "",
                    "GlobalIPv6Address": "",
                    "GlobalIPv6PrefixLen": 0,
                    "DriverOpts": null,
                    "DNSNames": [
                        "redis",
                        "b0a9283a8791"
                    ]
                }
            }
        }
    }
]
```


My Redis databases
localhost:8111
My Redis databases
Insights
Click & Learn
Search and Query
JSON
Triggers and functions
Time Series
Probabilistic
+ ADD REDIS DATABASE
Try Redis Cloud: your ultimate Redis starting point
Includes native support for JSON, Query and Search, and more
Or follow the guides:
Docker
Homebrew
Linux
Discover and Add Redis Databases
Add Database Manually
Use Host and Port to connect to your Redis Database
Autodiscover Databases
Use discovery tools to automatically discover and add your Redis Databases
You can manually add your Redis databases. Enter Host and Port of your Redis database to add it to RedisInsight. Learn more here.
Host*
172.27.0.2
Port*
6379
Should not exceed 65535.
Database Alias*
Dbwindar
Username
Enter Username
Password
Enter Password
Timeout (s)
30
Test Connection
Cancel
Add Redis Database


My Redis databases
localhost:8111
My Redis databases
Insights
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+ ADD REDIS DATABASE
Try Redis Cloud: your ultimate Redis starting point
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Database List Search
Database Alias
Host:Port
Connection Type
Modules
Last connection
Dbwindar
172.27.0.2:6379
Standalone
less than a minute ago