

## **DOKUMENTASI**

***docker-compose.yml***



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**SAINS DATA**

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# Instalasi Docker

```
PS C:\Users\rifat syarief> pip install docker
WARNING: Ignoring invalid distribution -ip (C:\Users\rifat syarief\AppData\Local\Programs\Python\Python312\Lib\site-packages)
Requirement already satisfied: docker in c:\users\rifat syarief\appdata\local\programs\python\python312\lib\site-packages (7.1.0)
Requirement already satisfied: pywin32>=304 in c:\users\rifat syarief\appdata\local\programs\python\python312\lib\site-packages (from docker) (306)
Requirement already satisfied: requests>=2.26.0 in c:\users\rifat syarief\appdata\local\programs\python\python312\lib\site-packages (from docker) (2.32.2)
Requirement already satisfied: urllib3>=1.26.0 in c:\users\rifat syarief\appdata\local\programs\python\python312\lib\site-packages (from docker) (2.2.1)
Requirement already satisfied: charset-normalizer<4,>=2 in c:\users\rifat syarief\appdata\local\programs\python\python312\lib\site-packages (from requests>=2.26.0->docker) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in c:\users\rifat syarief\appdata\local\programs\python\python312\lib\site-packages (from requests>=2.26.0->docker) (3.7)
Requirement already satisfied: certifi>2017.4.17 in c:\users\rifat syarief\appdata\local\programs\python\python312\lib\site-packages (from requests>=2.26.0->docker) (2024.2.2)
```

# Extension:Docker



## Docker

Microsoft  microsoft.com |  40,112,807 |     (95)

Makes it easy to create, manage, and debug containerized applications.

Uninstall  Auto Update 

DETAILSFEATURESCHANGELOGDEPENDENCIES

### Docker for Visual Studio Code

version **v1.29.3** installs **40M**

The Docker extension makes it easy to build, manage, and deploy containerized applications from Visual Studio Code. It also provides one-click debugging of Node.js, Python, and .NET inside a container.

# DOCKER.DESKTOP PERSONAL

# Containers

Containers

Images

Volumes

Builds

Docker Scout

Extensions

Containers [Give feedback](#)

Container CPU usage

4.86% / 1600% (16 CPUs available)










Container memory usage

245.99MB / 3.64GB










Show charts

Search

Only show running containers



	Name	Container ID	Image	Port(s)	CPU (%)	Last started	Actions
<input type="checkbox"/>	<input type="radio"/> gallant_satoshi	f567d1c715b	hello-world		0%	9 days ago	  
<input type="checkbox"/>	<input type="radio"/> dewad-23-unesa	-	-	-	0%	8 days ago	  
<input type="checkbox"/>	<input type="radio"/> kelas-h-rifat	-	-	-	4.87%	13 minutes ago	  

# Details Containers

<input type="checkbox"/>	<input type="radio"/>	kelas-h-rifat	-	-	-	0.03%	19 minutes ago	  
<input type="checkbox"/>	<input type="radio"/>	postgres_db	a5eb20935254	postgres:15-alpine	5432:5432 ↗	0%	19 minutes ago	  
<input type="checkbox"/>	<input type="radio"/>	pgadmin4	17a58b47fc75	dpage/pgadmin4:latest	5050:80 ↗	0.03%	19 minutes ago	  

Containers / postgres\_db

postgres\_db

 a5eb20935254  [postgres:15-alpine](#)

5432:5432 ↗

Logs

Inspect

Bind mounts

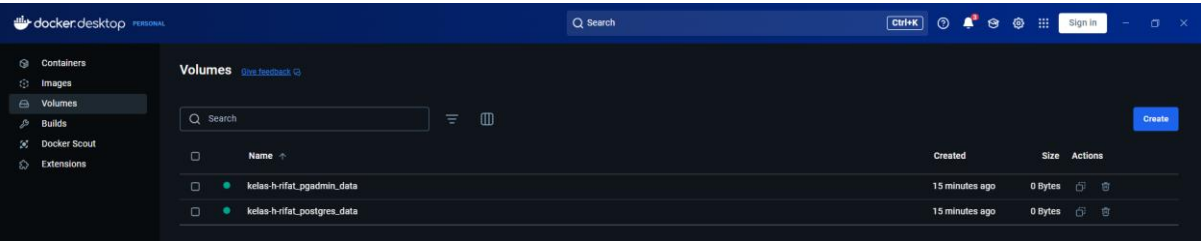
Exec

Files

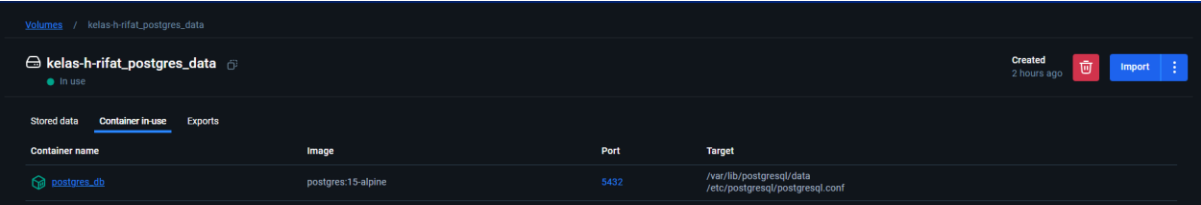
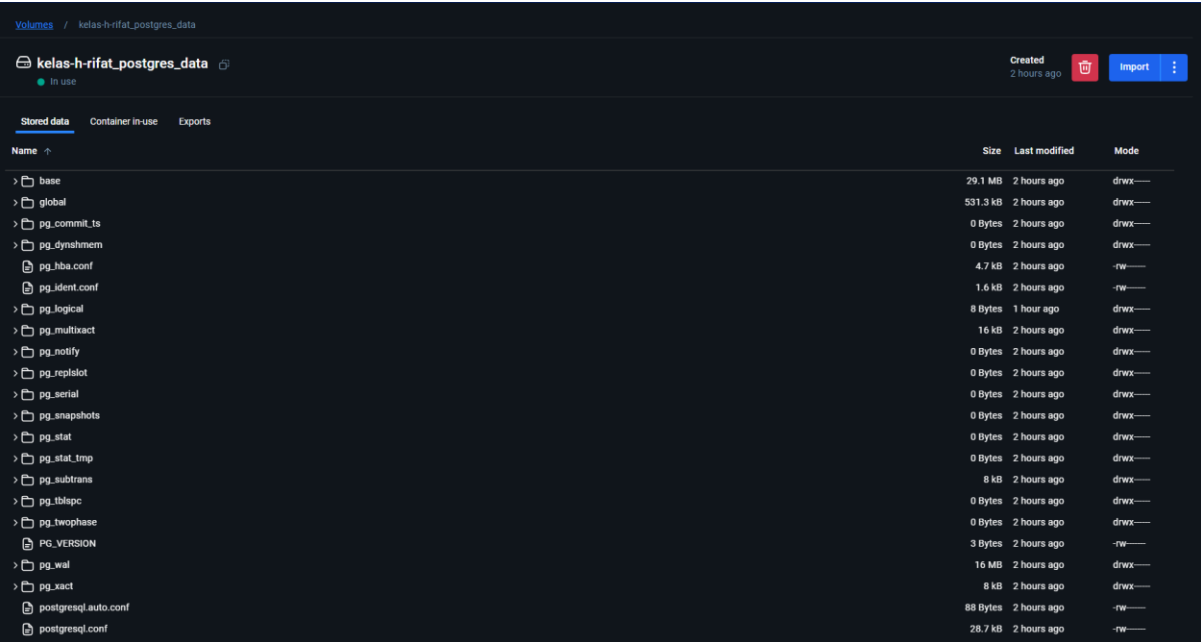
Stats

```
2024-12-14 11:00:20 2024-12-14 04:00:20.959 UTC [136] STATEMENT: CREATE TABLE users (  
2024-12-14 11:00:20     id SERIAL PRIMARY KEY,  
2024-12-14 11:00:20     name VARCHAR(100),  
2024-12-14 11:00:20     email VARCHAR(100),  
2024-12-14 11:00:20     kelas VARCHAR(100)  
2024-12-14 11:00:20 );  
2024-12-14 11:00:20  
2024-12-14 11:00:20 INSERT INTO users (name, email, kelas) VALUES ('Rifat', 'rifat@mhs.unesa.ac.id','2023H');  
2024-12-14 11:00:20  
2024-12-14 11:00:20 SELECT * FROM users;  
2024-12-14 11:00:20  
2024-12-14 11:00:20 UPDATE users SET email = 'muhammadrifat.23053@mhs.unesa.ac.id' WHERE id = 1;
```

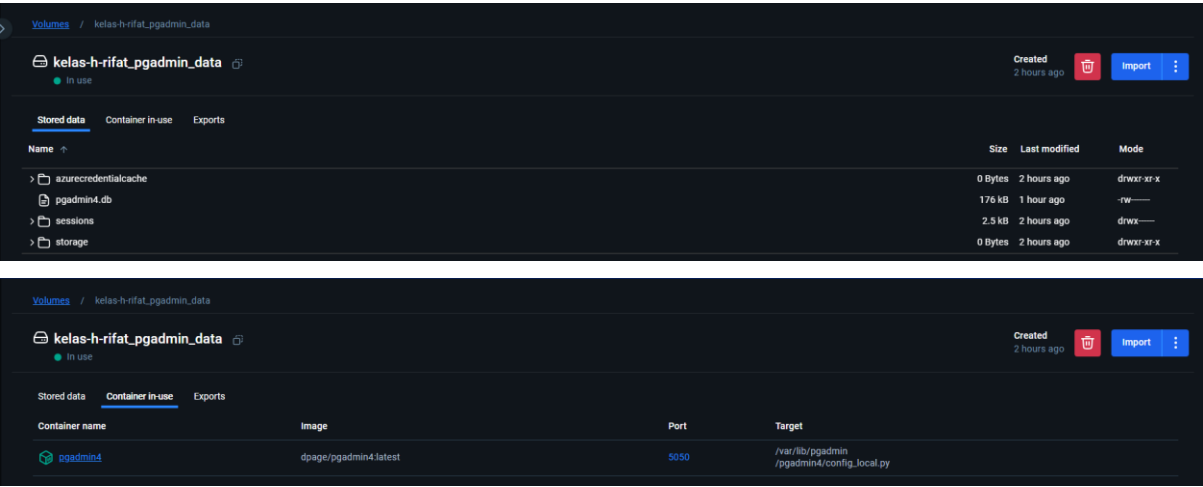
Volumes



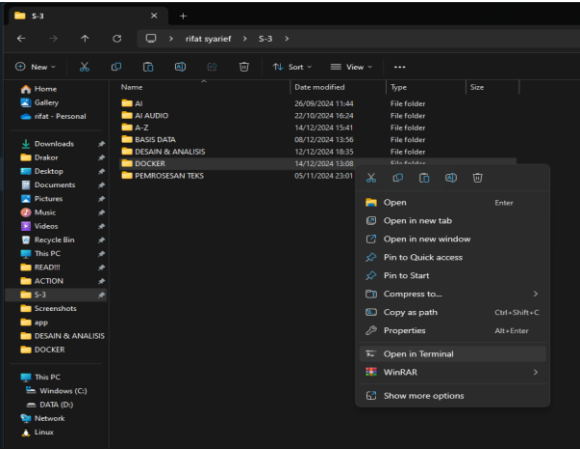
POSTGRES



PGADMIN



COMMAND PROMPT



```
PS C:\Users\rifat syarief\S-3\DOCKER> docker-compose up -d
[+] Running 5/5
✔Network kelas-h-rifat_pg_network      Created           0.2s
✔Volume "kelas-h-rifat_pgadmin_data"   Created           0.0s
✔Volume "kelas-h-rifat_postgres_data"  Created           0.0s
✔Container postgres_db                 Started           3.4s
✔Container pgadmin4                   Started           3.7s
PS C:\Users\rifat syarief\S-3\DOCKER> docker-compose ps
NAME                IMAGE                COMMAND              SERVICE    CREATED      STATUS      PORTS
pgadmin4            dpage/pgadmin4:latest "/entrypoint.sh"    pgadmin    12 seconds ago Up 9 seconds 443/tcp, 0.0.
postgres_db        postgres:15-alpine   "docker-entrypoint.s..." postgres   13 seconds ago Up 11 seconds 0.0.0.0:5432->
5432/tcp
```

docker-compose up -d: Perintah ini digunakan untuk memulai layanan yang didefinisikan dalam file docker-compose.yml. Opsi -d (detached) menjalankan kontainer di latar belakang.

docker-compose ps: Perintah ini digunakan untuk melihat status kontainer yang terkait dengan layanan yang didefinisikan dalam file docker-compose.yml. Ini memberikan informasi tentang kontainer yang sedang berjalan.

```
PS C:\Users\rifat syarief\S-3\DOCKER> docker exec -it postgres_db /bin/bash
a5eb20935254:/#
```

"docker exec -it postgres\_db /bin/bash" digunakan untuk masuk ke dalam sebuah kontainer yang sedang berjalan dan mengakses shell interaktif di dalamnya. Setelah itu, akan masuk ke dalam kontainer PostgreSQL dan mendapatkan akses ke shell Bash di dalamnya. Shell prompt akan menjadi "a5eb20935254", di mana "a5eb20935254" adalah ID kontainer yang dihasilkan secara acak.

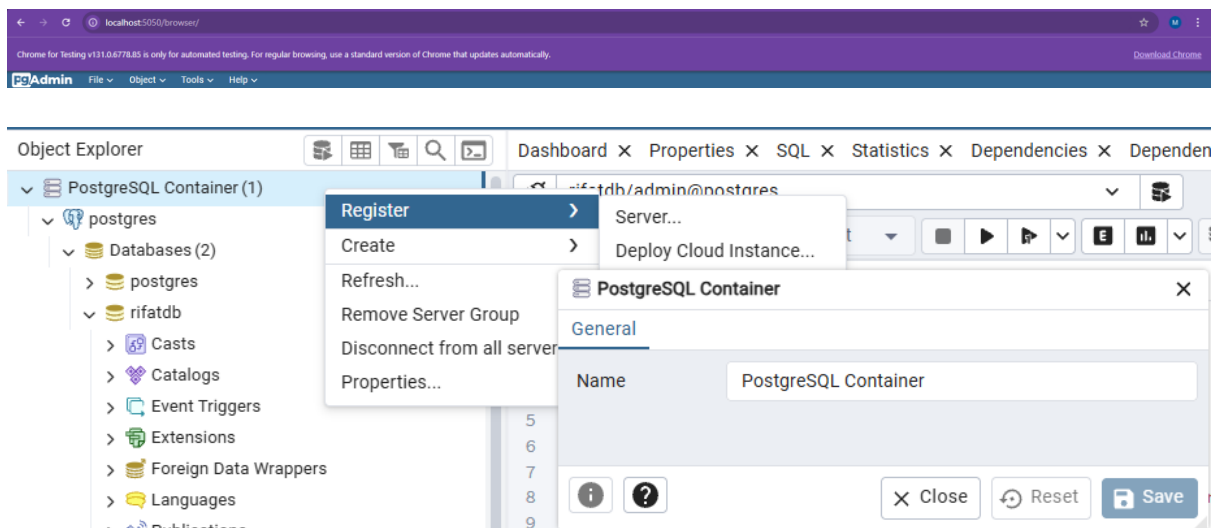
```
PS C:\Users\rifat syarief\S-3\DOCKER> docker exec -it postgres_db /bin/bash
a5eb20935254:/# psql --version
psql (PostgreSQL) 15.10
a5eb20935254:/# psql -U admin -d rifatdb
psql (15.10)
Type "help" for help.

rifatdb=# \dt
```

```
List of relations
Schema | Name  | Type  | Owner
-----+-----+-----+-----
public | users | table | admin
(1 row)
```

**WEB pgAdmin4 melalui <http://localhost:5050>**

### CREATE SERVER



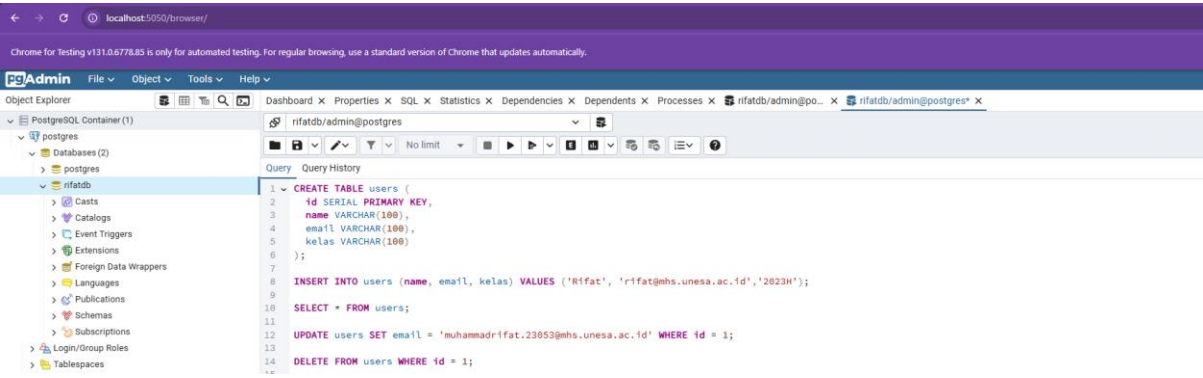
## CREATE CONNECTION

The image shows two screenshots of the 'postgres' connection configuration window. The left screenshot shows the 'General' tab with fields for Name, Server group, Background, Foreground, and Comments. The right screenshot shows the 'Connection' tab with fields for Host name/address, Port, Maintenance database, Username, Kerberos authentication?, Role, and Service.

## CREATE DATABASE

The image shows three screenshots illustrating the database creation process. The top screenshot shows a context menu for 'postgres' with 'Create' selected. The middle screenshot shows the 'rifatdb' database selected in the tree. The bottom screenshot shows the 'rifatdb' database configuration window with fields for Database, Owner, and Comment.

SIMPLE QUERY



Data Output:

	id [PK] integer	name character varying (100)	email character varying (100)	kelas character varying (100)
1	2	Rifat	muhammadrifat.23053@mhs.unesa.ac.id	2023H