



# POSTGRES COMPATIBILITY INDEX

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Software | Databases, RDBMS, ...



## Database Comedy Blog





**Craig Kerstiens - Finger lime evan...** @craigkers... · Dec 3, 2024

"Postgres compatible"

- No views/triggers/sequences
- No foreign key constraints
- No extensions
- No NOTIFY ("ERROR: Function pg\_notify not supported")
- No nested transactions
- No JSONB

What, what IS it compatible with?

e1g 41 minutes ago | unvote | next [-]

Just tried a quick test cluster -

```
Identifies as PG 16.5
No views/triggers/sequences
No foreign key constraints
No extensions
No NOTIFY ("ERROR: Function pg_notify not supported")
No nested transactions
No json(b)
```

45

77

930

150K



WHEN AMAZON UNVEILED  
DSQL, SOCIAL MEDIA  
BUZZED WITH VIRAL  
DISCUSSIONS ABOUT ITS  
TOUTED POSTGRESQL  
COMPATIBILITY.

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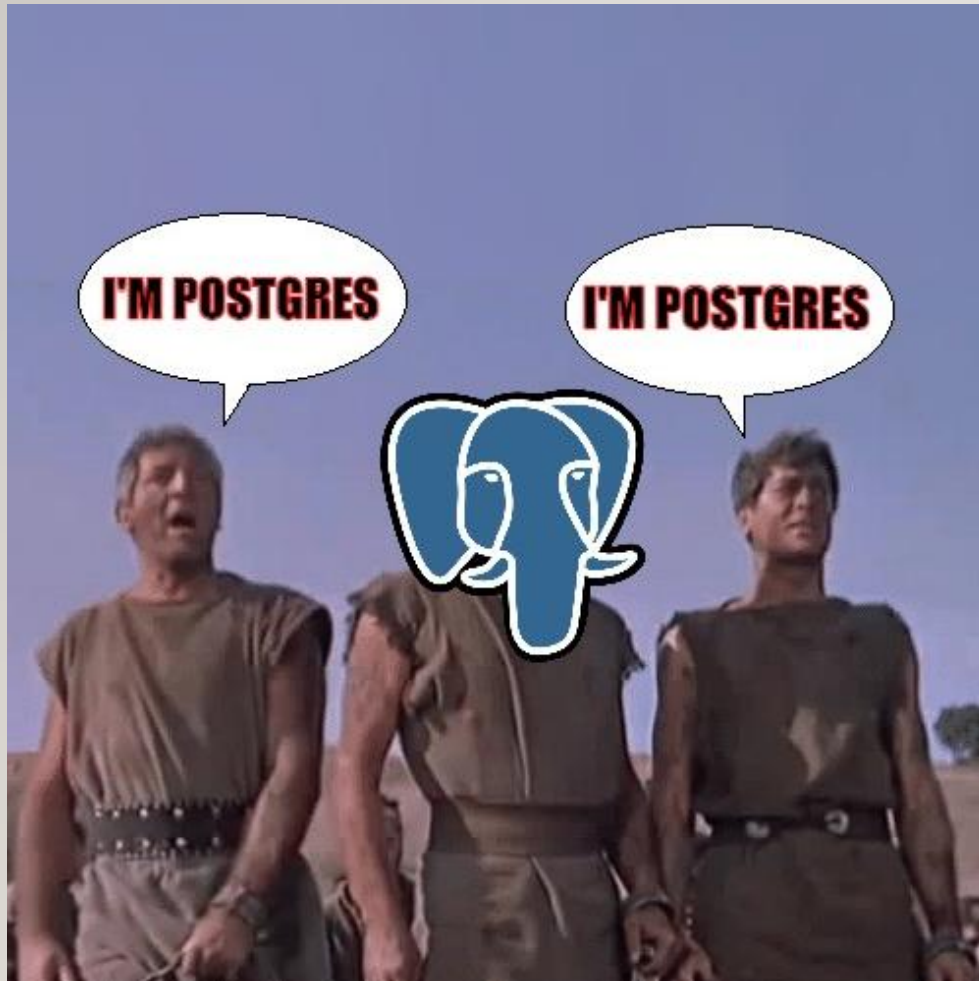




Winning is not enough. All others  
must lose.

— *Larry Ellison* —

AZ QUOTES



I'M  
SPARTACUS

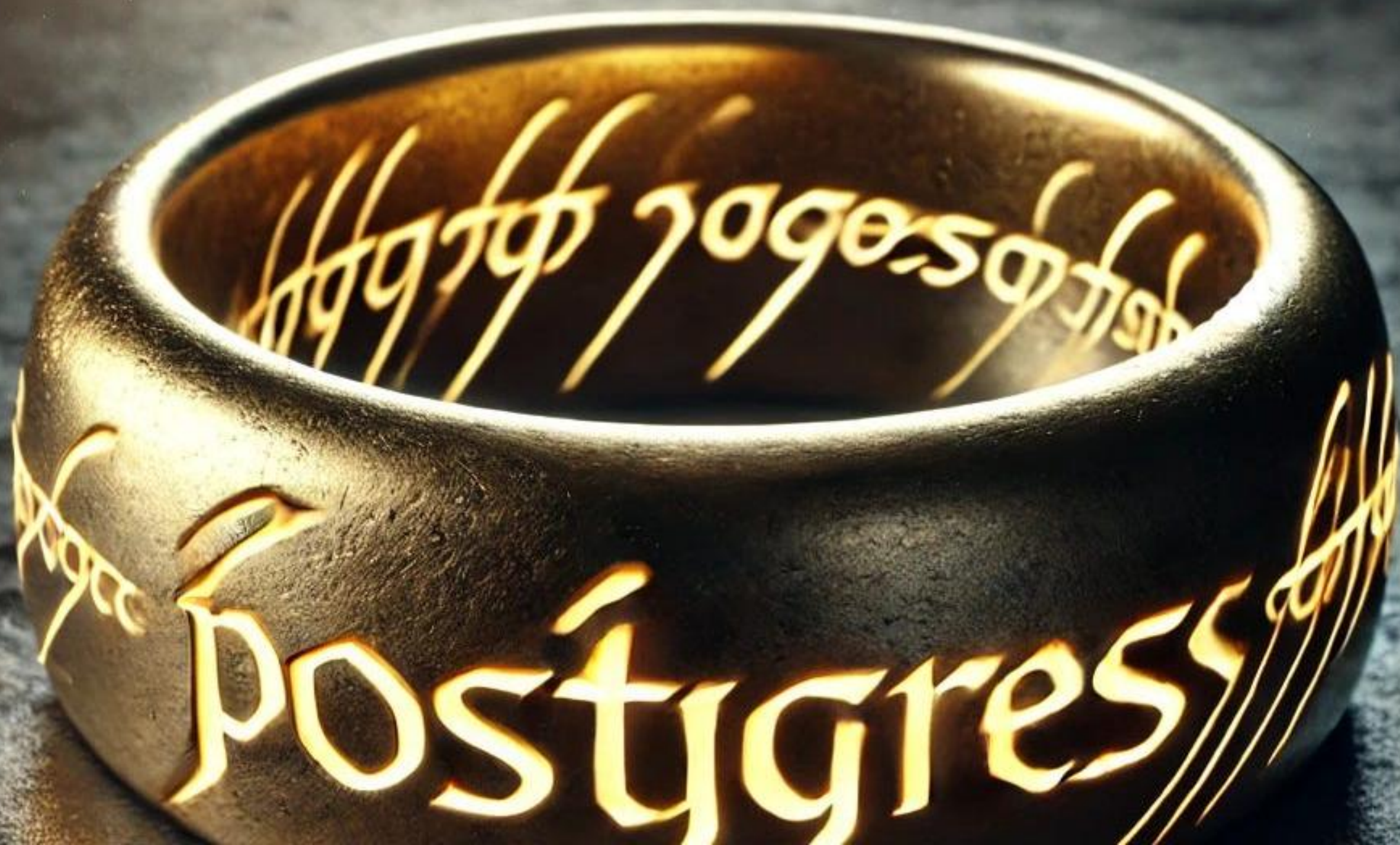
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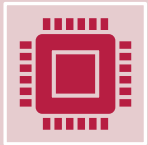
# ORIGIN STORY

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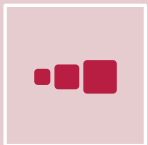




# Postgres Compatibility Index (PCI)



**PCI runs a battery of tests** on the database in question, poking at every feature Postgres has to offer.



Each feature is scored, depending on whether it works, or implodes spectacularly.



The results are weighted, calculated, and distilled into a single PCI score, a percentage of compatibility perfection.



```
vbrdev@pplinuxdev:~/postgres-compatibility-index/postgres-compatibility-index$ py
Feature Geospatial Types failed in data_types: type "geometry" does not exist
LINE 1: CREATE TABLE test_geo (geom GEOMETRY);
          ^

Feature Vector failed in data_types: type "vector" does not exist
LINE 1: CREATE TABLE test_vector (embedding VECTOR(3));
          ^

PCI Score: 88.57%
PCI testing completed. Report saved as 'pci_report.json'.

PCI Autotest in action, failures were induced on purpose to check sc
```

#### ===== PostgreSQL Compatibility Report =====

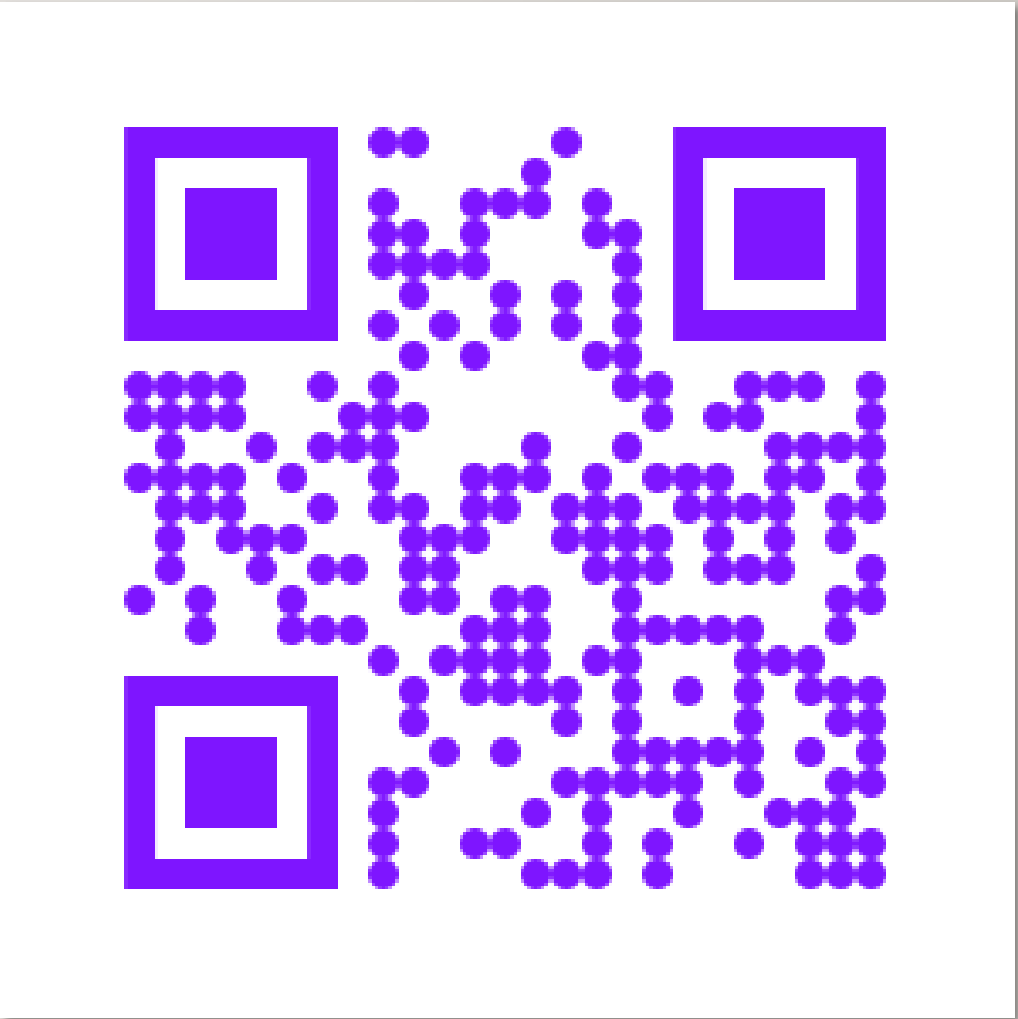
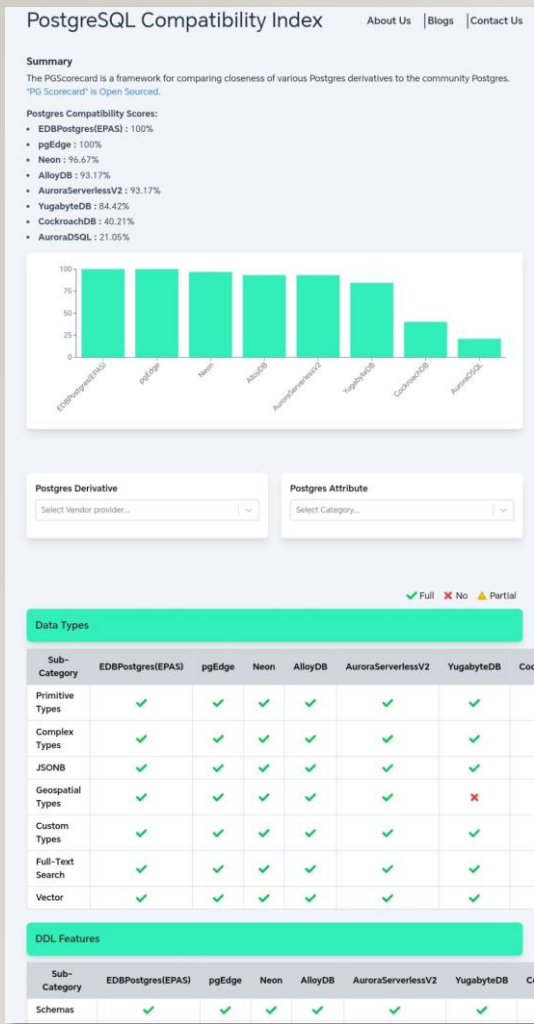
Overall Compatibility Score: 85%

The following features failed:

+-----+-----+	
Category	Feature
+-----+-----+	
data_types	Vector
procedural_features	Triggers
+-----+-----+	

# DEMO

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PR for new DB Addition



Open-Source code contribution

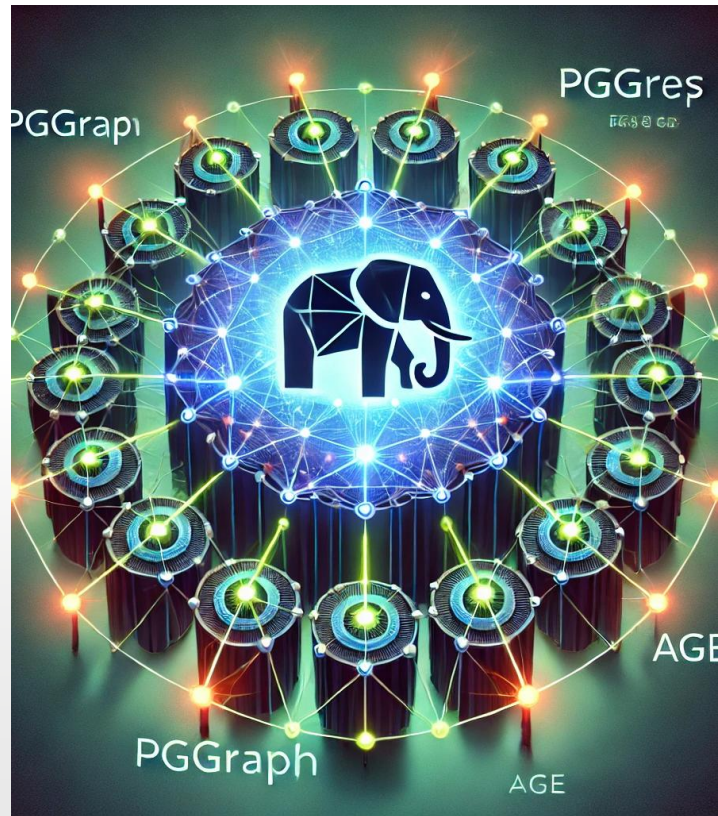




Postgres Is “Gen AI platform with pgvector, pgai, pg\_vectorize, pgml extensions”







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Postgres Is "A graph database thanks to Apache AGE, PGPlot, PGGraph etc"



Postgres Is "An event streaming engine."

→ pgmq & dbos





POSTGRES IS "A TIME-SERIES DATA ENGINE OPTIMIZED FOR IOT WORKLOADS."

➔ TIMESCALEDB

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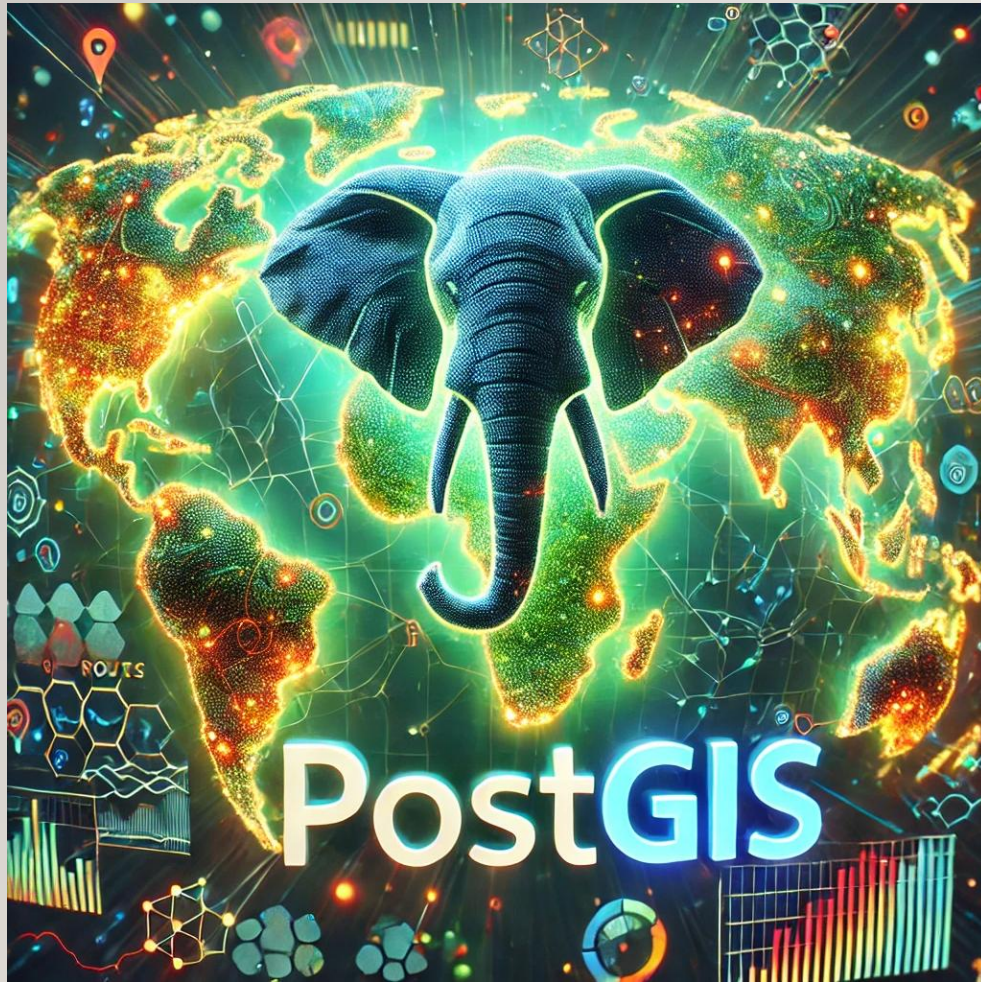




POSTGRES IS "AN  
OPEN-SOURCE  
ALTERNATIVE TO  
MONGODB."

➔ FERRETDDB &  
PONGO





POSTGRES IS "A  
GEOSPATIAL  
POWERHOUSE WITH  
POSTGIS FOR  
ADVANCED SPATIAL  
DATA ANALYSIS."





POSTGRES IS  
“PETABYTE SCALE  
ELASTICSEARCH  
REPLACEMENT.”

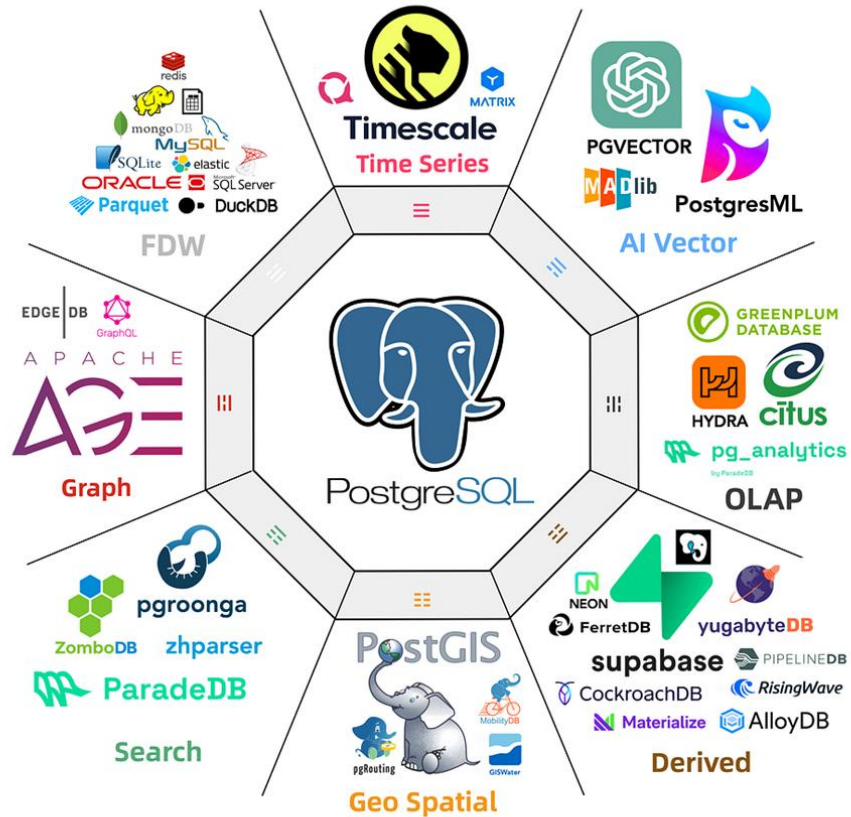
➔ BAGGER





POSTGRES IS "A  
DATA LAKE WITH  
PG\_DUCKDB,  
PG\_LAKEHOUSE,  
HYDRA FOR SCALABLE  
ANALYTICS."





# POSTGRES IS THE DATA- ECOSYSTEM

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Postgres is  
a working-  
class hero.







Postgres is Eater of the database worlds.



# Postgres is all of us.





THANK  
YOU

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