

AgensSQL

Open Source PostgreSQL based DBMS
with Oracle compatibility, 24 x 365 global tech support

What are the trends on IT market ?

IT industry key trends

5G Network
Full stack development
Machine Learning (ML)
Virtual Reality (VR) and Augmented Reality (AR)
Cloud Computing Platform Engineering
Cybersecurity 5G Technology Metaverse
Spatial Computing
Big Data and Analytics
Internet of Things (IoT) Remote Work Technologies
Sustainable IT Wearable Device
Edge Computing Blockchain DevOps
Intelligent Applications **Artificial Intelligence (AI)**
Quantum Computing
Automation system

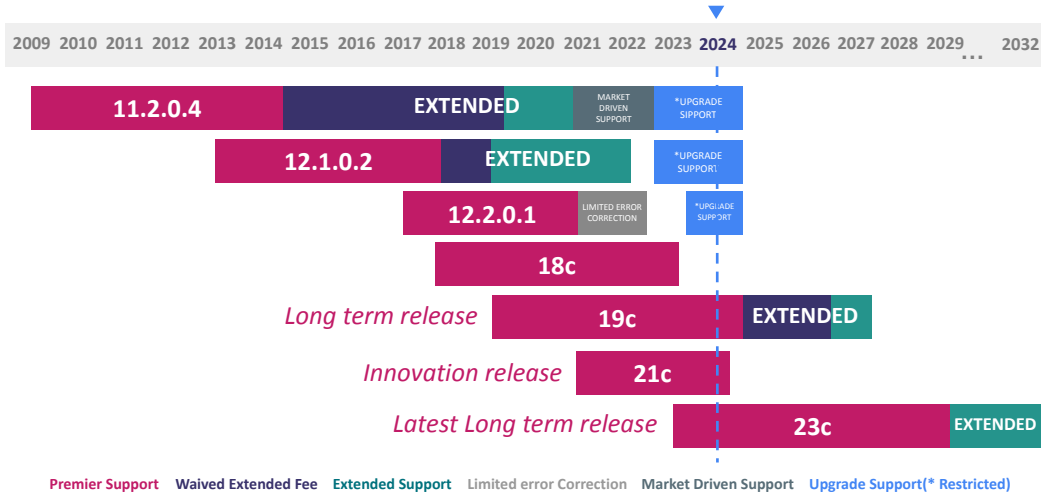
Data volume and complexity increasing

Impacts on DBMS

- ▶ Evolution for **scalability**
- increasing data volumes and workloads
- ▶ Requirement on **flexibility**
- accommodate different data models and types
- ▶ Focus on **security and compliance**

Oracle database releases

- Continuous update required to catch up the releases



Pain points

- Substantial cost burden and license compliance matters
- Upgrade / migration complexity and compulsion
- Limited customization and vendor lock-in

Alternative solution

Open-source
+
Improvement
Business model

“Enhanced the advantages and mitigated the weakness of open-source”

WHY PostgreSQL out of open-source DB?

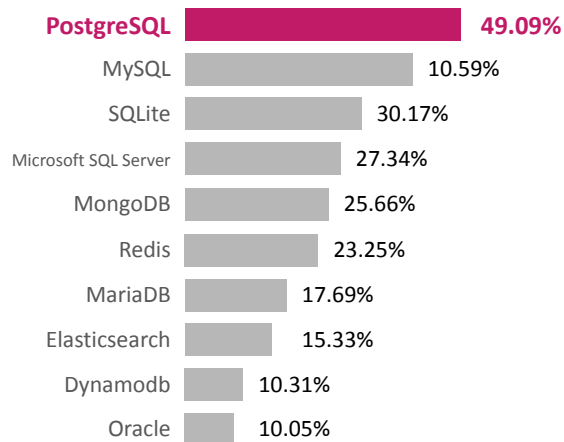
the #1 developer favorite open-source DBMS

“Open source has become open for business”

The Professionals' Pick

Over 50% Favor PostgreSQL

DB-Engine Ranking



Source : [2023 StackOverflow Survey](#)

DB-Engines Ranking

The DB-Engines Ranking ranks database management systems according to their popularity. The ranking is updated monthly

Read more about the [method](#) of calculating the scores

Rank			DBMS	Database Mod
Mar 2024	Feb 2024	Mar 2023		
1.	1.	1.	Oracle +	Relational, Multi-mc
2.	2.	2.	MySQL +	Relational, Multi-mc
3.	3.	3.	Microsoft SQL Server +	Relational, Multi-mc
4.	4.	4.	PostgreSQL +	Relational, Multi-mc
5.	5.	5.	MongoDB +	Document, Multi-mc
6.	6.	6.	Redis +	Key-value, Multi-mc
7.	7.	↑ 8.	Elasticsearch	Search engine, Mult
8.	8.	↓ 7.	IBM Db2	Relational, Multi-mc
9.	9.	↑ 11.	Snowflake +	Relational

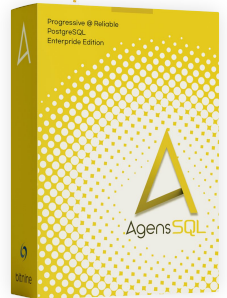
Source : [DB-Engine](#)

Your Data, Our Passion: **PostgreSQL at the Core**

“Enhanced the advantages and mitigated the weakness of open-source”

AgensSQL

Open Source PostgreSQL based DBMS
with Oracle compatibility, 24 x 365 global tech support



WHY AgensSQL ?

Migrate from **Oracle** to **PostgreSQL**
based **AgensSQL**



Performance compatible



Cost Efficiency



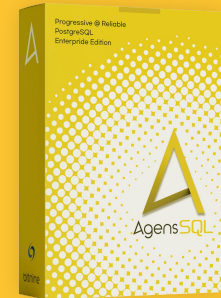
Oracle Compatibility



24 x 365
Tech Support

AgensSQL

Your Data, Our Passion: **PostgreSQL at the Core**



WHY Bitnine ?

“Reliable” Company

- The only DBMS tech company listed in **KOSDAQ market**
- Various business cases **for 12 years history**

“Innovative”
Technology leader

- **Opensource** philosophy in foundation
- **Core level** database developers in R&D

“Global” player

- Worldwide located **offices and subsidiaries**
- **24 x 365** enterprise level tech support

Product Architecture

AgensSQL

Enterprise Package

3

High Availability

4

Management Tools

5

Graph DB Extension
Apache AGE®

DB Core Engine

1

PostgreSQL based

2

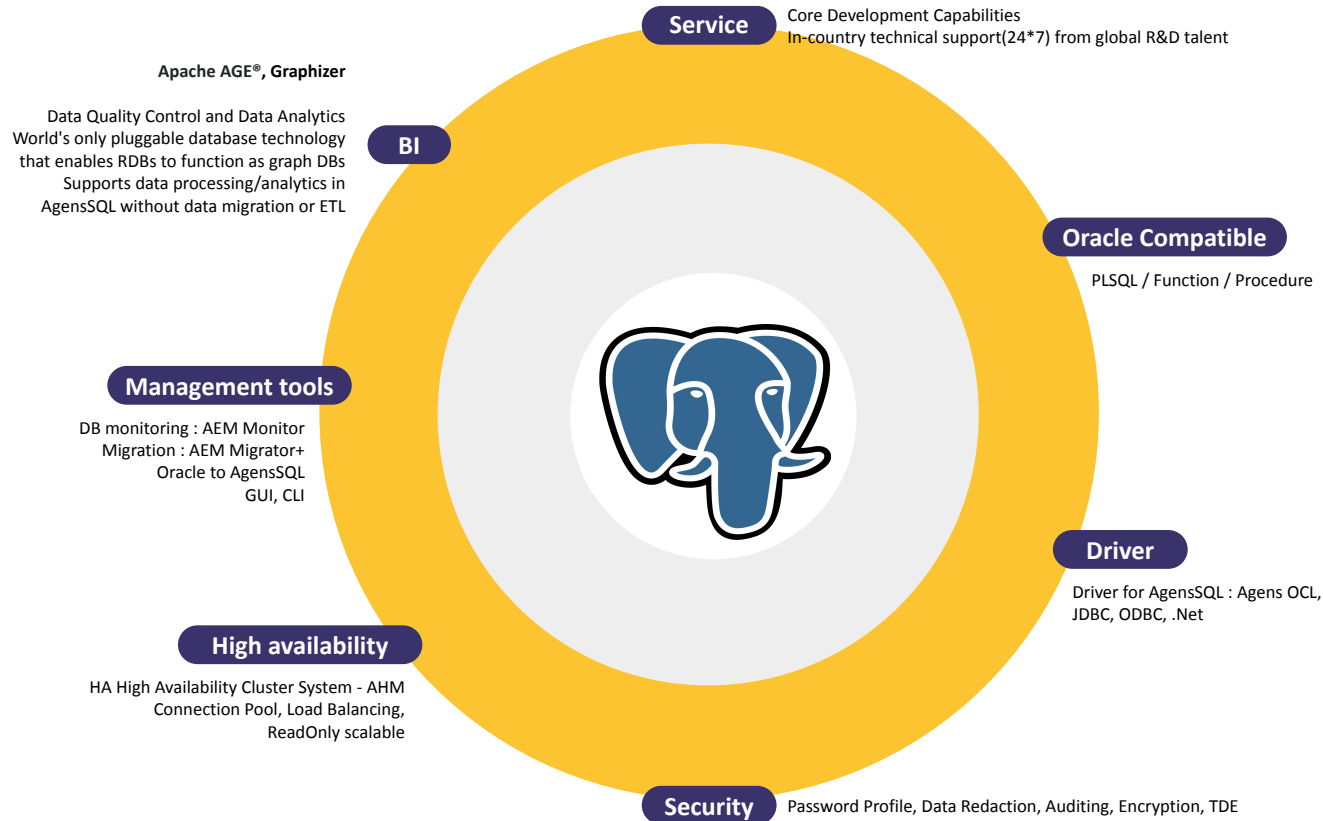
Oracle Compatibility

6

24 * 365
Technical Support

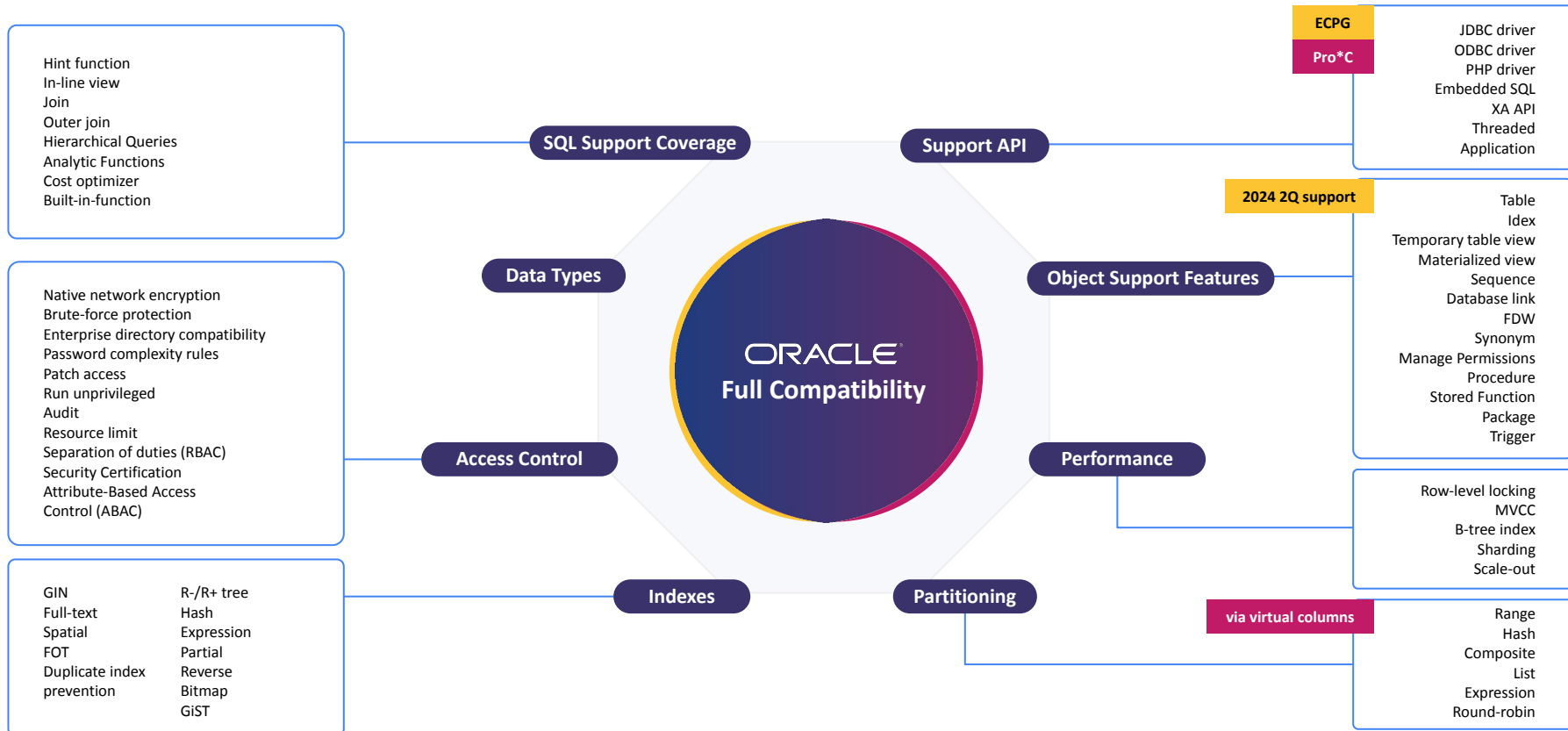
PostgreSQL based DB

AgensSQL! PostgreSQL-based stable database with the enhanced security features, tools and tech support



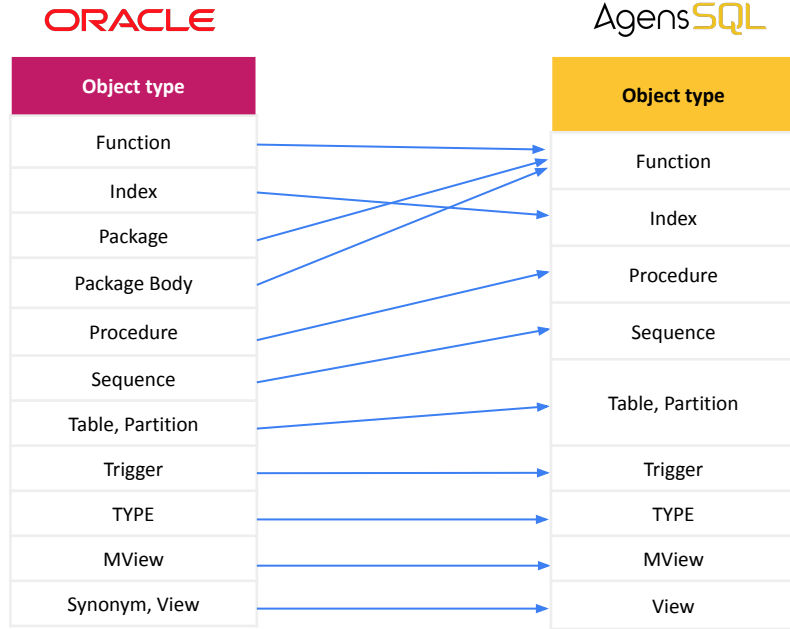
2 Oracle Compatibility

AgentsSQL! Oracle compatibility can help your team minimize the transition burden



2 Oracle Migration

AgensSQL Oracle Transition: Making Migration Effortless for All



Check Point

- **Case Sensitivity** : Oracle -> Case string processing, Postgresql -> Lower case processing
- **NULL Handling** : Processing of Non-space String is recognized as Null in Oracle and Value of String in AgensSQL

Oracle Migration tools with AEM

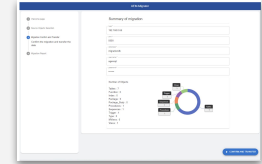
Integrated compatibility technology

AEM Migrator



AEM Migrator Oracle to PG Mode

- Data Type Compatibility
- User Feature Procedural Transformation Support

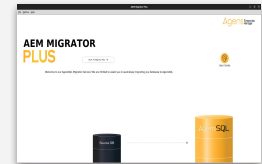


AEM Migrator Plus



Migration Desktop(GUI) Oracle to Oracle Mode

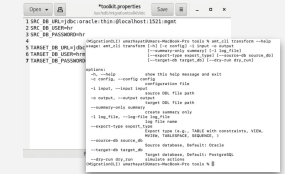
- Provide available schemas and table views for data migration process



Migration Tool (CLI) Oracle to Oracle Mode

Features for DBAs

- Gain detailed control over the migration process
- Oracle schema extraction and conversion



Enterprise Edition / Enterprise Edition Plus

Standard Edition

3 High Availability

Guaranteeing High Availability in Continuous Business Environments with AHM

HA Features

Active-Active (read-only), Active-standby



After a failure on the primary server, it switches to a secondary server within a few seconds to a maximum of 2 minutes, ensuring the continuation of service

Automatic fail-over

Ensure stable system operation through automatic fail-over processing in case of failure by checking the heartbeat

Connection pooling

Maintains a connection to the DB server and reuses it when a new connection request with the same attributes (User, DB, Protocol) comes in

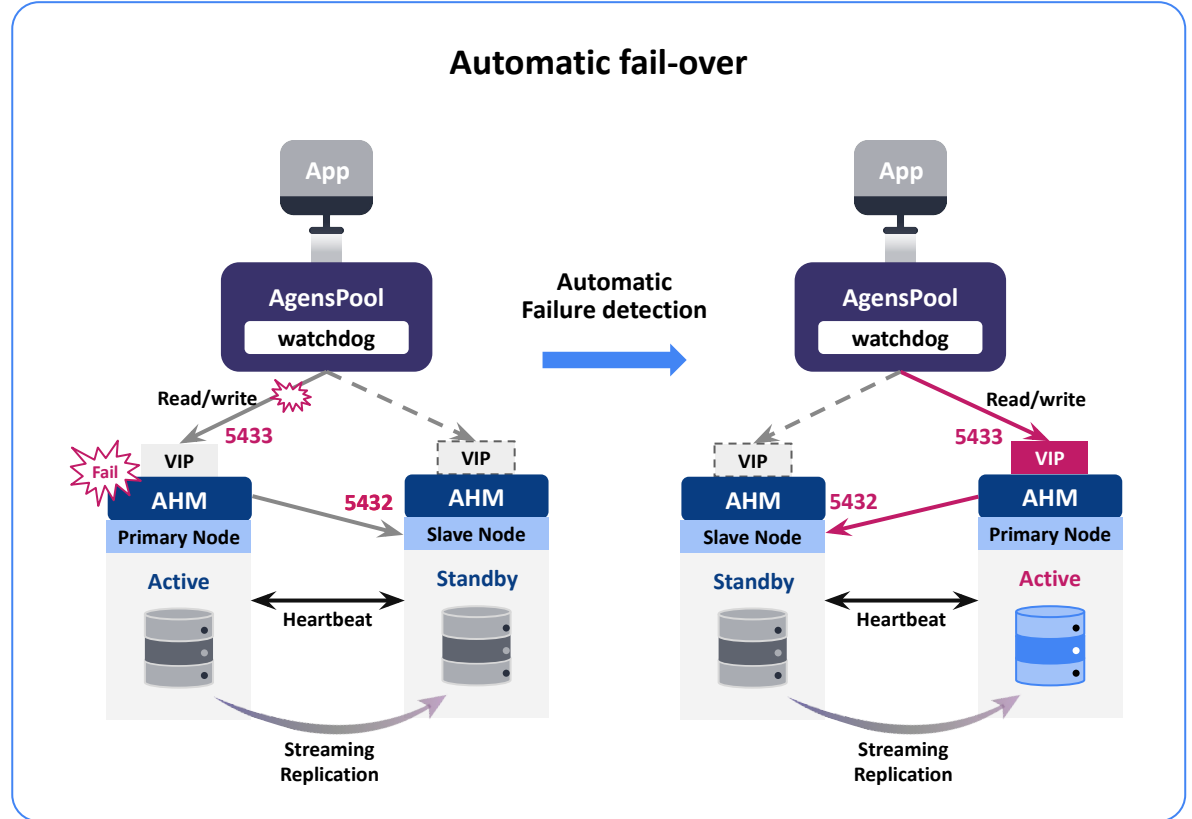
Load balancing

Reduces the load on the entire server by distributing it to reduce the load on the DB server in systems that use Replication

Replication

Protect data from failures by replicating DB between servers in real time with redundancy configuration

Automatic fail-over

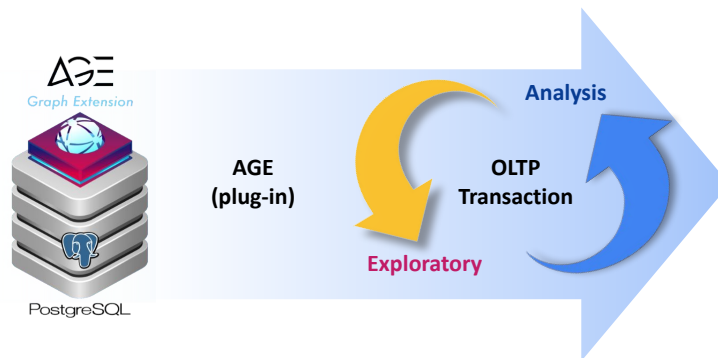


5 Graph ext. Apache AGE®

Apache AGE® makes Graph Database available on top of AgensSQL without migration

AgensSQL

“ Apache AGE® is an open-source software that offers the world-first pluggable extension of graph data modeling and analytics on top of a relational database ”



RDB + GDB

World's Only RDB + GDB
graph analysis solution

Seamless Data Processing

Data processing and analysis within
AgensSQL without migration

Enhancing data integrity

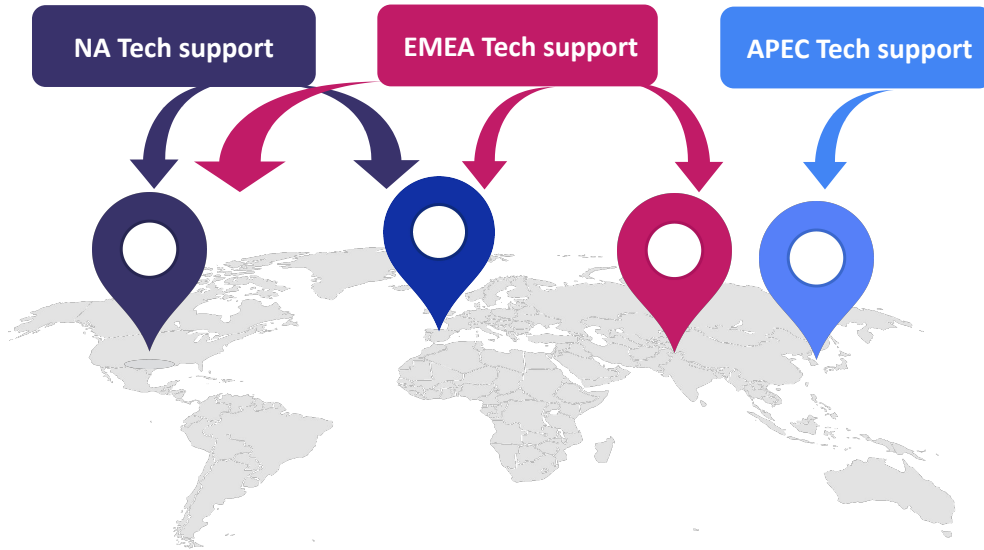
Hybrid Queries

World's first hybrid query feature
supporting simultaneous execution of
SQL (RDB) and Cypher (GDB) queries

Graph Technology Efficiency

Handling complex business data analysis
more efficiently and cost-effectively
using graph technology

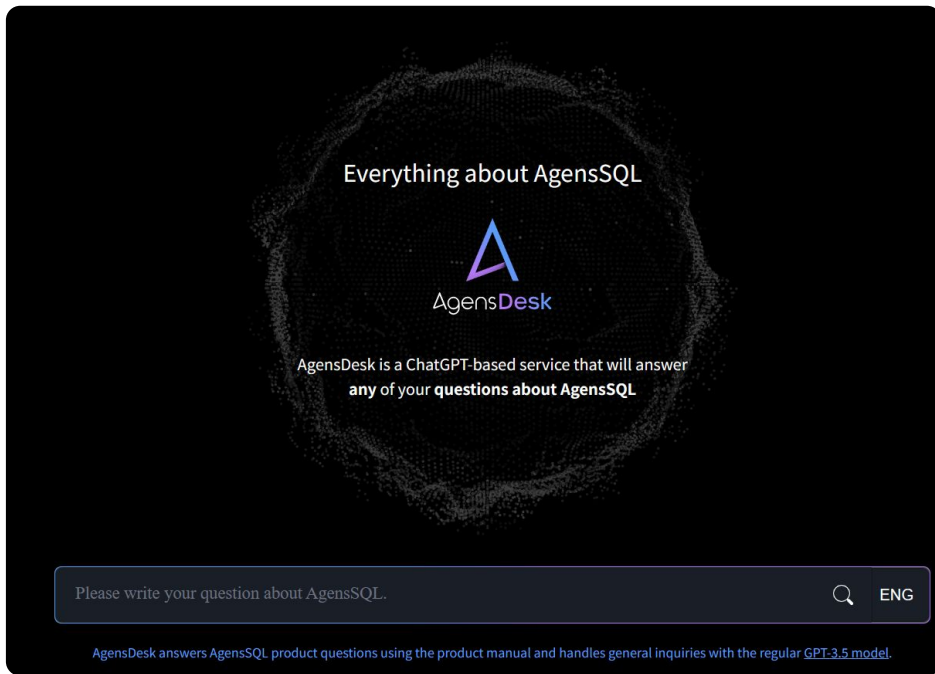
Commitment for 24 x 365 Technical Support



- **Rapid responsive** to all levels inquires
- 24 x 365, **anytime available** service windows
- **Collaborative direct support** from vendor

6 Tech support portal

“AgensDesk”, AI-ChatGPT based tech portal



- Troubleshoot access from **anywhere**
- **Round-the-clock** technical support available
- **Personalized approach** for engineering support

Professional Services

Professional Services for Database Excellence: PostgreSQL, Oracle Compatibility, and More

Professional Services

PostgreSQL DBMS Services

- Initializing and setup services
- DBMS upgrade services
- High availability implementation services
- Performance tuning services
- Problem determination and solving services
- Backup and recovery services

Oracle Compatibility Consultancy Services

- Support interoperability of Oracle functions, procedures and triggers
- Support PL/SQL features in PostgreSQL
- Customization of Oracle features based on additional customer requirements




Oracle Data Migration Services

- Data migration consultancy services for prerequisites and environment review and application compatibility
- Performing Data migration using conversion tool from various databases to PostgreSQL (Oracle, MySQL, MSSQL)
- Cloud migration: Data migration from on-premise to cloud environment

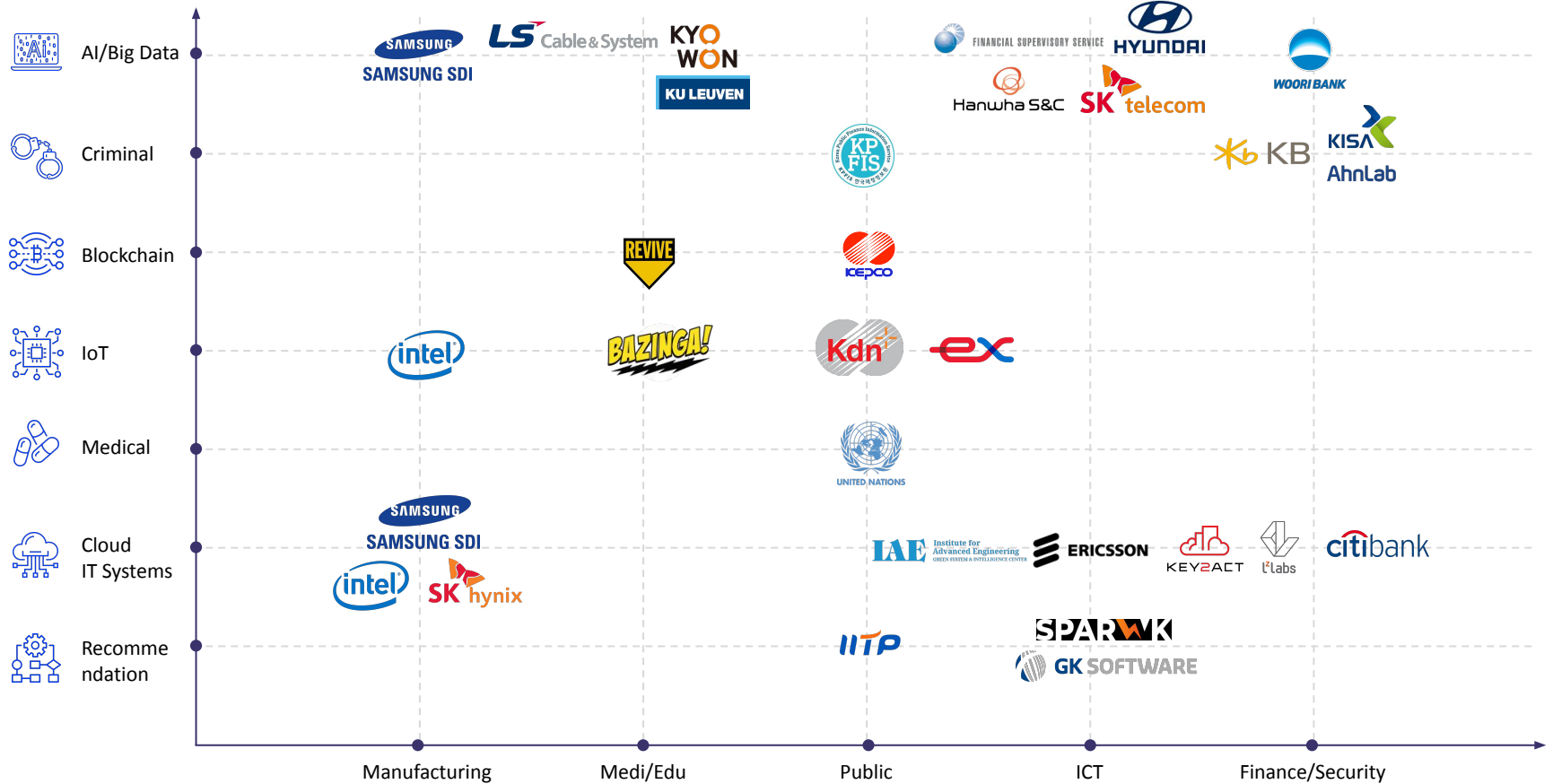
Interface Development Services

- Support interoperability from interface development between PostgreSQL and 3rd party solutions
- Support interoperability in PostgreSQL extensions

Product Package

	DBMS	High Availability	Management Tools	Graph DB support
Enterprise Edition +	 Oracle Compatibility	Agens HA Manager Agens Pool (LB)	AEM admin AGE Viewer AEM Monitor AGE Loader AEM Migration + Graphzier	Apache AGE® Graphizer
Enterprise Edition	 Oracle Compatibility	Agens HA Manager Agens Pool (LB)	AEM admin AEM Monitor AEM Migration +	
Standard Edition			AEM admin AEM Monitor AEM Migration	

References



Contact us marketing@agedb.io



THANK YOU.

© AGEDB Technology Ltd. 2024 The AGEDB logo and AGEDB brand names are trademarks or registered trademarks of AGEDB Technology Ltd. in Canada and other countries. Other company, product and service names may be trademarks or registered trademarks of their respective owners. All rights reserved. No part of this document may be reproduced, stored or transmitted in any form without prior written permission of AGEDB Technology Ltd. AGEDB Technology Ltd. endeavors to ensure the information in this document is correct and fairly stated but does not accept liability for any errors or omissions.

Published: April 2024

The Apache Software Foundation Apache AGE, AGE, Apache, the Apache feather, and the Apache AGE project logo are either registered trademarks or trademarks of the Apache Software Foundation.