

Evolving to what is next in databases

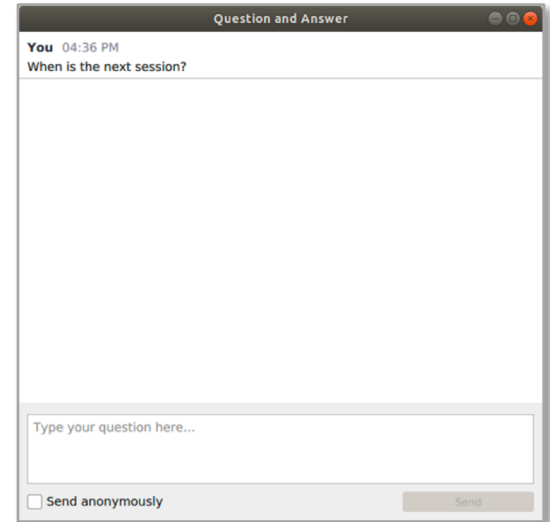
Tom Rieger

Senior Client Engineer



House Keeping

- This webinar only includes people from your organization.
- Because EDB is an existing vendor, we have an NDA in place to communicate openly.
- In using Zoom's Webinar technology
 - Everyone is on <MUTE>
 - Questions are entered into the tool
 - We are recording the webinar and will share the private link shortly after the session



Agenda

What I hope you take away from this session

- What has defined the ‘database’ world up to now
- The history and landscape
- SQL is still ‘king’
- What ‘open source’ is doing to databases
- Looking forward



What has defined the 'database' world up to now

Traditional relational – traditional vendors

- Traditional pricing
- Traditional constraints and terms
- Traditional expectations



Fit for purpose

- Analytics – Teradata, Vertica
- 'Data Lakes' - Hadoop

teradata.

VERTICA



Open-source – Postgres



DB-Engines tracks
over 350 options



Over time we have a slew of ‘fit for purpose’ options

There are a lot of sub-options depending on the structure of the data



Relational Databases

SQL, ACID, blend OLTP & DSS & extensible



Key-Value Databases

Key Value based data storage



NOSQL Databases

Big Data and wide-column, graph and document stores



In-Memory Databases

Optimized for ultra-high OLTP throughput



Time-series Databases

High volume machine generated data



Analytical Databases

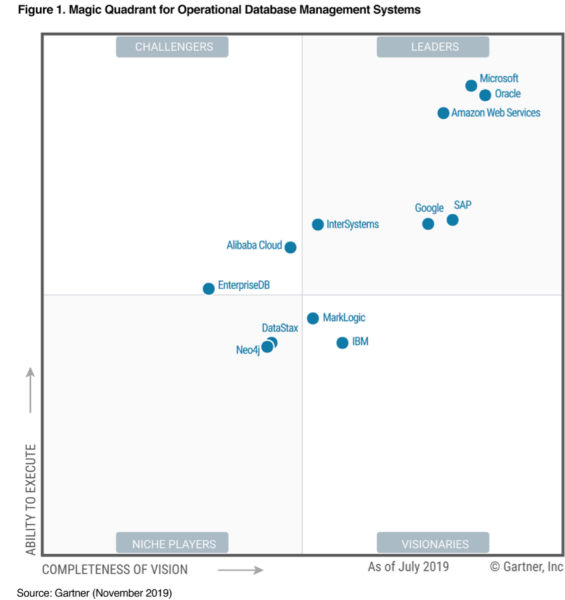
Denormalized, structured data sets for analysis

Gartner MQ 'Operational Database'

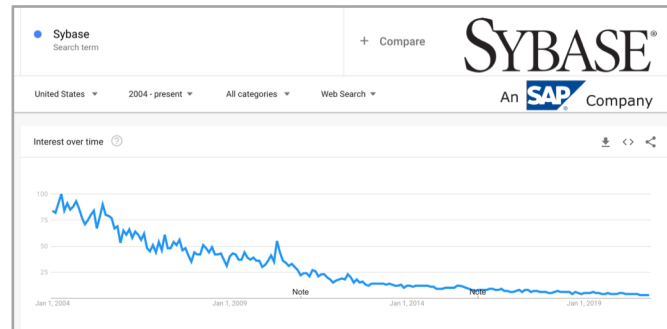
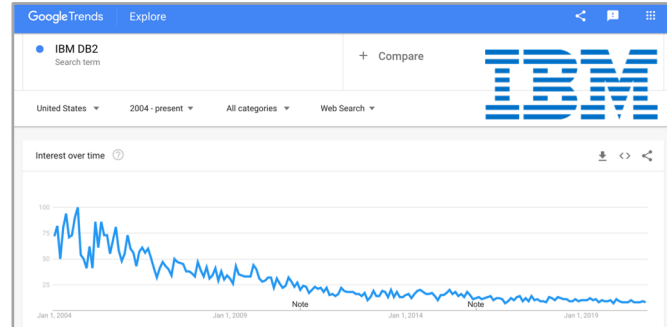
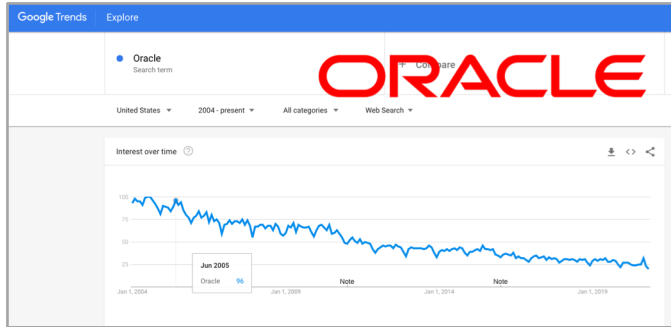
2014



Latest

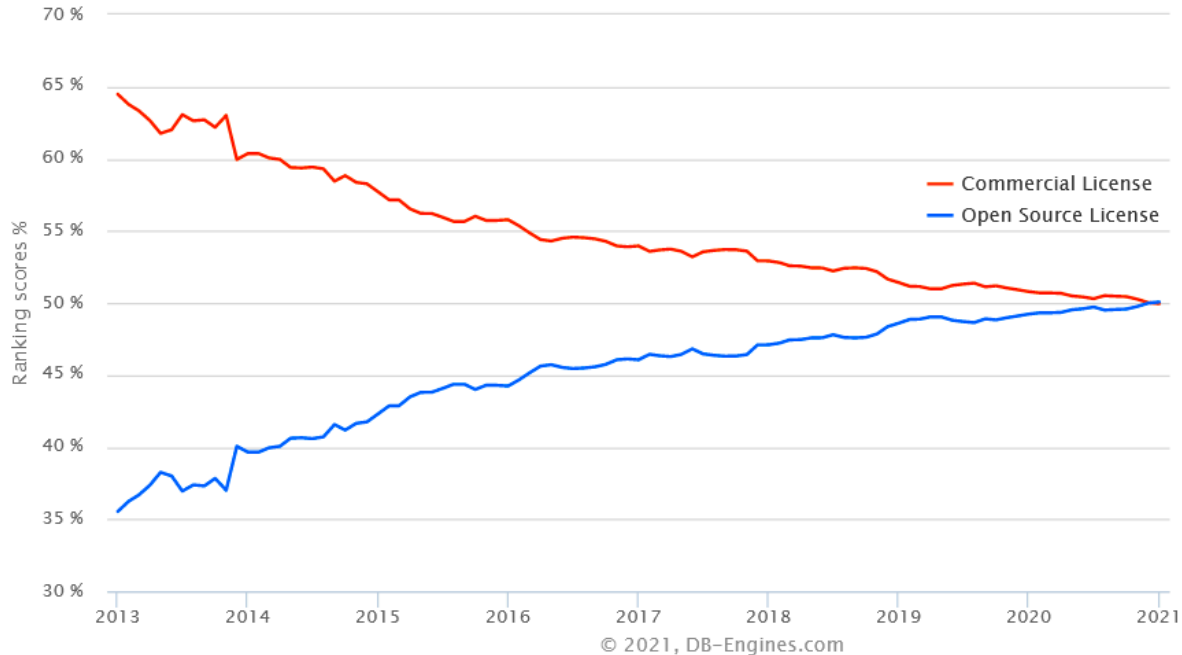


Measuring relevance – “Trending” on Google



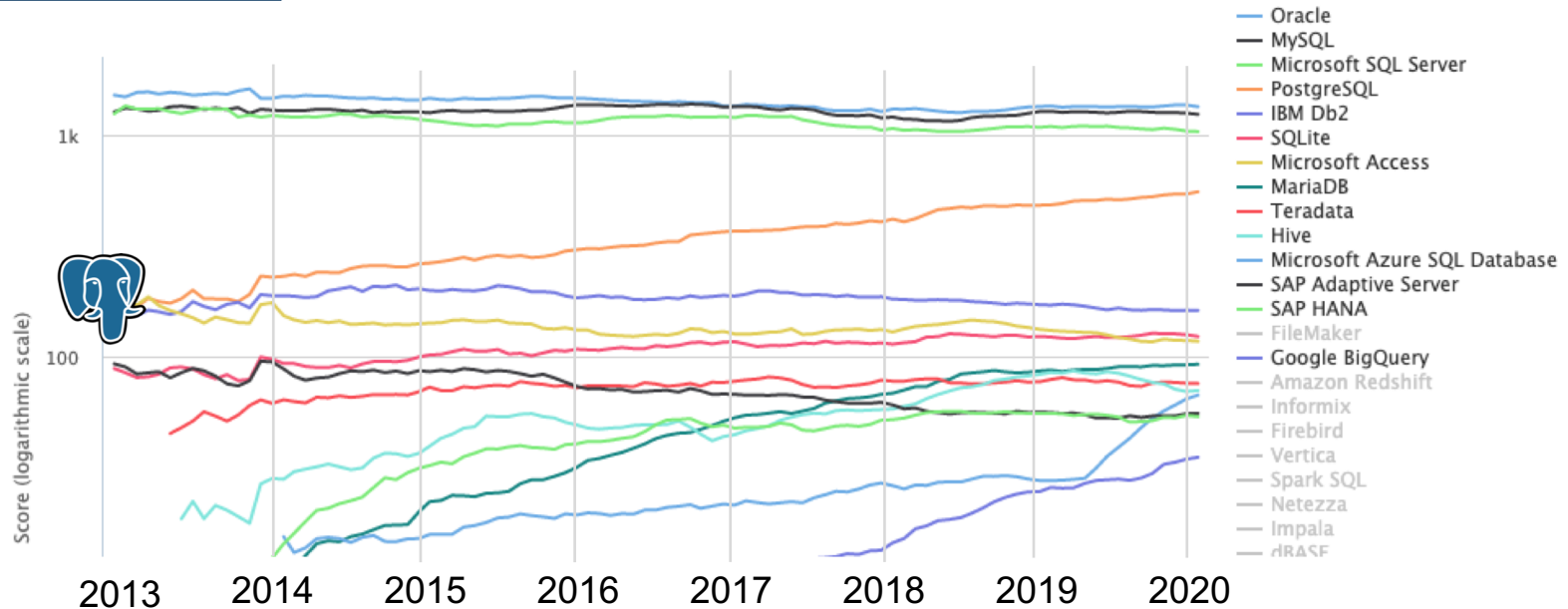
There is a database revolution happening....

Open Source is the next innovators and enablers



Tracking databases over last 7 years

DB-ENGINES



“Why” is there change?

“There are no good WHY questions”

- High Maintenance Costs – Low Value
- Lack of innovation
- Contracts that drive:
 - More cost
 - Less flexibility
- Platform limitations
- Audits should NOT be normal



“Contractual Emancipation” is paramount

FORTUNE

Microsoft says it's fixing software licensing, customers wonder when

CBR Computer Business Review

Oracle Sued for Allegedly “Systematically Coercing and Bribing” Customers



Microsoft most aggressive when it comes to software audits, says Flexera report - Enterprises aren't big fans of the dreaded software audit, but nearly half of them have faced one from Microsoft.



Beware of the Changing URL in Oracle's Contracts – “Oracle uses non-contractual ‘policies’ to extract revenue”

COMPUTERWORLD

As public cloud vendors race to cut costs, Oracle does the opposite



Microsoft Slaps Tax on Taking Its On-Prem Licenses to AWS, GCP

Digital transformation research discussing Open Source



Cloud Platforming →

Open Source Technology →

Legacy Decommissioning /Rationalization →

Cloud Solutions →



← Complex Legacy Technology

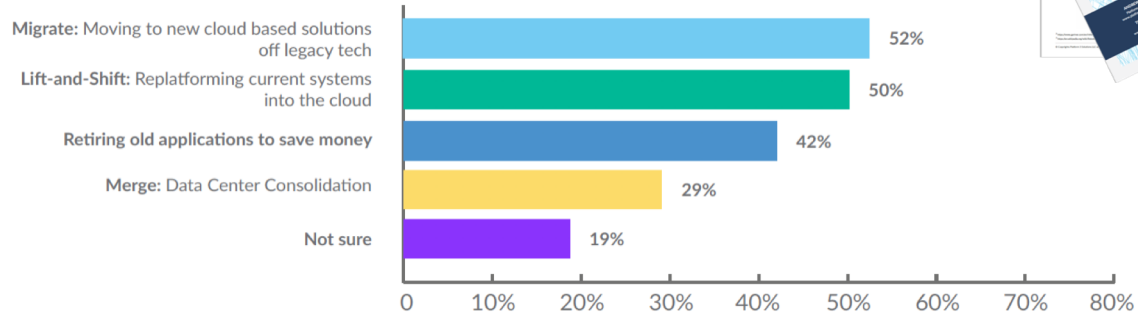
← Wasted Money

← COVID Economy

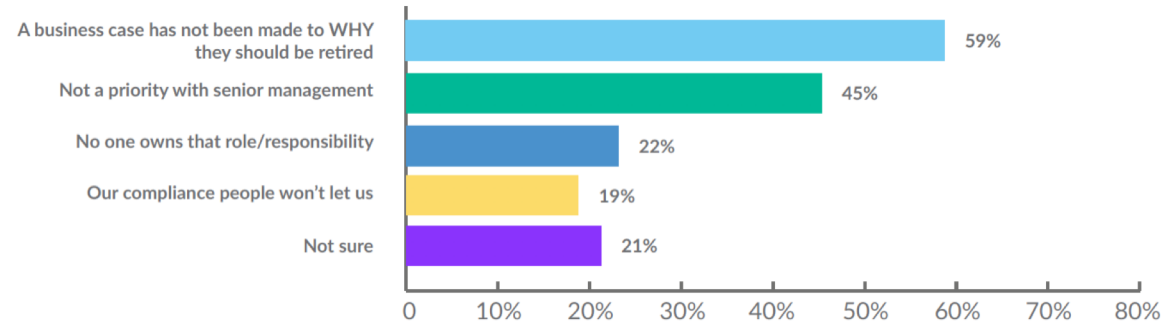
← New Competition

What are we doing about it?

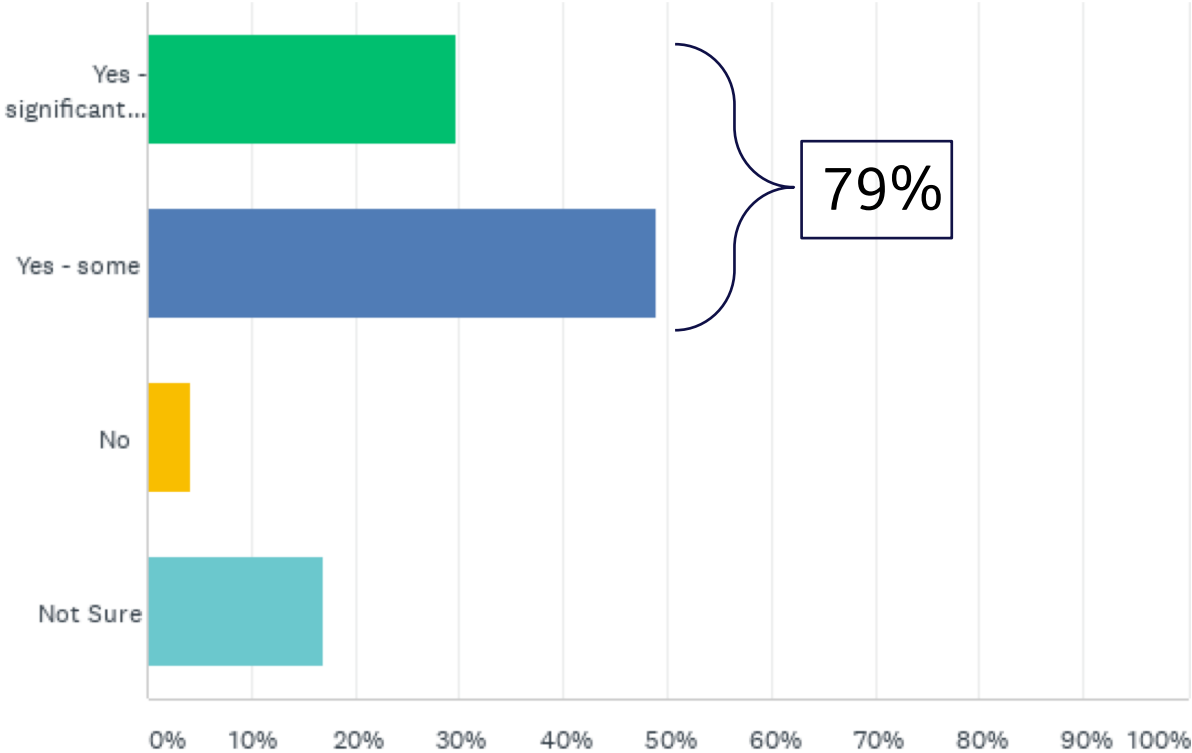
Which of these are happening in your organization over the next 12 months?



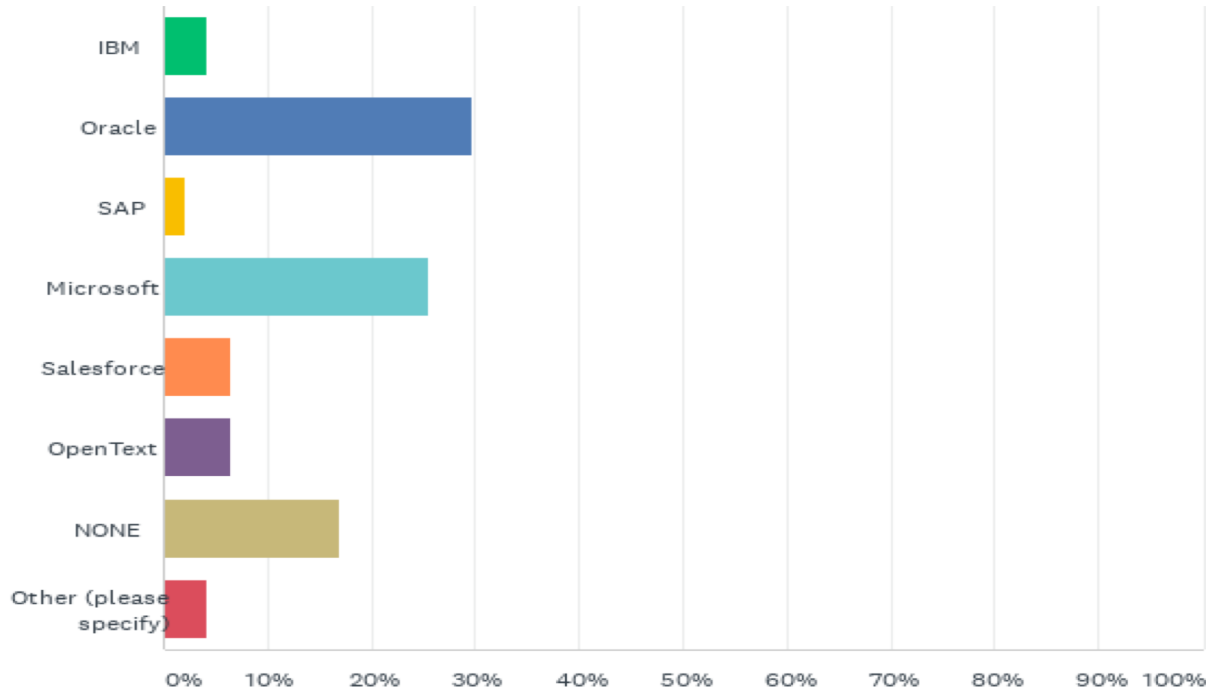
Why do you think older systems are still running in your organization?



NEW: Do you think there is wasted money in keeping old tech alive in your organization?



NEW: Please end this sentence - "We are looking to reduce our spend with..." (click all that apply)



Looking Forward – What you want

What clients tell us

- More innovation
- Easier to provision where we want
- Easier to administer – more autonomous
- “Help me change”
- Bring ‘recommendations’ and AI in administration
- “Don’t box me in with the contracts”



Looking Forward – A broad view

Gartner®

Gartner states.....

- **By 2021, cloud database management system (DBMS) revenue will account for 50% of total DBMS market revenue.**
- **Through 2021, relational DBMS technology will continue to be used for at least 70% of new DBMS applications and projects.**
- **By 2022, open-source-based DBMS products will account for more than 25% of DBMS revenue, which will increase their attractiveness to mainstream buyers.**
- **By 2023, 75% of all databases will be on a cloud platform – a development that will drastically change the DBMS vendor landscape.**



Why does PostgreSQL win?

Diversity of **Use Cases**



Migration



New App Development



Replatforming to
Cloud and Containers

Diversity of **Workloads**



System of Record



System of Analysis



System of
Engagement

Diversity of **Deployments**



Public Cloud – **IaaS**



Public Cloud – **DBaaS**



Private Cloud

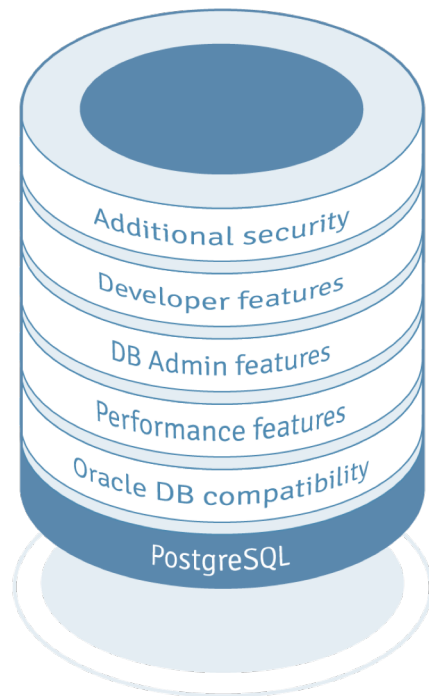


Virtual Machines



Containers

EDB Postgres Advanced Server



EDB Postgres Advanced Server

- **Security** - Password policy management, session tag auditing, data redaction, SQL injection protection, and procedural language code obfuscation
- **Performance** - Query optimizer hints, SQL session/system wait diagnostics
- **Developer Productivity** - Over 200 pre-packaged utility functions, user-defined object types, autonomous transactions, nested tables, synonyms, advanced queuing
- **DBA Productivity** - Throttle CPU and I/O at the process level, over 55 extended catalog views to profile all the objects and processing that occurs in the database
- **Oracle Compatibility** - Offers compatibility for schemas, data types, indexes, users, roles, partitioning, packages, views, PL/SQL triggers, stored procedures, functions, and utilities

Other webinars for your organization this month



Cloud and Databases 101 – Value, Sizing and Best Practice

Webinar will discuss the why and how data management in clouds is growing at such an accelerated rate. A detailed business case will be reviewed with benchmarks and sizing topics.

In closing



Questions

Please make sure if you have questions to type them into the tool



Exit survey

There is an exit survey that will pop up – please tell us your thoughts on this webinar



Contact us

Brian Moriarty–

Brian.moriarity@enterprisedb.com

Tom Rieger –

tom.rieger@enterprisedb.com

www.enterprisedb.com