Should I stay or should I go ..?

Thoughts before moving to another database platform
Markus Flechtner

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Trivadis – Our key figures.

- 16 Trivadis locations with more than 650 employees.
- Sales of CHF 115 million (EUR 106 million).
- Over 250 Service Level Agreements.
- More than 4000 training participants.
- Research and development budget: CHF 5.0 million.
- More than 1900 projects each year with over 800 customers.
- Financially independent and sustainably profitable.
Markus Flechtner

- Principal Consultant, Trivadis, Düsseldorf
- Oracle since 1990: Development, Support, DBA
- Focus: RAC, HA, Upgrade + Migration
- Teacher: RAC, New Features, Multitenant, PostgreSQL for Oracle-DBAs
- Co-Author of the book "Der Oracle DBA" (Hanser, 2016)

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Almost everyone wants to migrate

- Currently, there's a kind of "database migration hype"

- More players in the RDBMS market
  - Enterprise DB is very active in promoting their product "Enterprise DB Advanced Server" as an alternative to Oracle

- Specialized No-SQL-Databases
  - Document store
  - In-Memory Cache / Database
  - Graph database
  - Time Series database
Agenda

• "Never change a running system, so why should I migrate"?

• Decision criteria

• Which databases to migrate?

• Why should I stay?

• Summary
Why should I go (migrate)?
Possible reasons to leave Oracle..

- Political decisions
- Oracle is expensive
- Oracle support is bad
- Other databases have more features
- We don't need all these Oracle features
- Oracle doesn't like us anymore
Schleswig-Holstein läutet Abschied von Microsoft ein

Die schleswig-holsteinische Landesregierung setzt bei der IT-Beschaffung den Kurs auf Open Source und strebt langfristig eine „vollständige Ablösung“ von Closed-Source-Software an.

Oracle is expensive ... (1) – a short poll

Which database is more expensive (5 years period)?

- Oracle Database Standard Edition 2
- Enterprise DB PostgreSQL Standard
- Enterprise DB PostgreSQL Advanced Server
Oracle is expensive ... (2)

<table>
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<th>Metrics</th>
<th>Licence (1 time)</th>
<th>Support / Subscription annual fee</th>
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<td>Oracle SE2</td>
<td>Socket</td>
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### Server

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<td>TCO / 4 years</td>
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<td>TCO / 5 years</td>
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<td>EDB Advanced Server</td>
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<td>Oracle SE2</td>
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Not considered:
- Discounts
- Different functionality of Oracle SE2 vs. EDB Postgres Standard vs. EDB Advanced Server
- Migration costs (analysis, migration, testing)
- Training
Oracle Support is bad

- It takes a long time until support starts working on my SRs
- .. And even longer until my issues are resolved
- .. Often there is no solution
- It's faster to find the solution yourself

- The support analysts do not understand me
- They always ask the same question for a single SR
- The want to keep the customer busy, to make their statistics look good
- ..
Features, features, features..

- Other databases have more features

- We don't need all these Oracle features
Oracle doesn't like us anymore

• There was this nasty licence audit last month …

• Last year I got some tickets for this nice Oracle customer event
  • This year not
  • And some people told me the event this year was much better

• Last week the Oracle sales representative won on the golf course
  • .. And this was the first time ever
Decision criteria
(Technical) Decision Criteria

• Compare the databases by feature

• Prioritize the features
  • Required
  • Nice-to-have

• Evaluate the database products
(Technical) Decision Criteria - Example

- High Availability Solutions
- Scalability
- Backup & Recovery
- Security
- Monitoring
- Administration
- Support
- Availability of Patches & Upgrades
- Available tools

- Database Features
  - Partitioning
  - Compression
  - Encryption
  - Replication
- BLOB support
- Full-Text-Search
- JSON-Support
- XML-Support
- REST-API
- ....
Which databases to migrate?
Which databases to migrate (first)

• Simple databases
  • No or few Oracle specific features

• Databases from commercial vendors
  • Which support multiple databases

• The database can be the smaller part
  • Think about the clients and the applications
Why should I stay?
Open Source vs. Closed Source

• Oracle is "closed-source" and a "vendor-lock-in"

• A lot of database products offered by commercial vendors are based on open source
  • With additional features
  • Using these products is another kind of "vendor lock-in"

• The same applies to customized databases offered by some cloud providers

• Pure Open Source is an option, ...
  • But think about support
If costs are the argument ...

• Do not forget the "hidden" costs (beside licence costs)
  • Migration
  • Training
  • Operation

• Think about
  • Consolidating your Oracle Databases
  • Reducing the number of CPUs
  • Moving from Enterprise Edition to Standard Edition 2
Oracle Support is bad – Yes, but ..

• The are "good" and "bad" support analysts at Oracle
• We are all human beings – and even "good" support analysts have "bad" days
• Very often it's not the knowledge but simple misunderstanding

• It's probably the same with other commercial software vendors, too
  • They all want to cut costs

• If you migrate to pure Open Source software you rely on the community
Oracle is expensive ...

- Yes, it's expensive, ..

- But before moving to another platform, please think about
  - Is it possible to migrate your databases and applications?
  - How much does it cost? (migration, testing, modifications ..)
  - Training for your employees
  - Operating concept
  - Monitoring, Backup, etc.

- Keep your infrastructure simple
  - You are an IT specialist, not a zookeeper
Features, features, features ..

• Other databases have more features
  • But how do you manage with Oracle now?

• We don't need all these Oracle features
  • Downsizing to SE2 may be an option
Summary
Summary

- The database market becomes broader
  - New specialists (No-SQL database)
  - New generalists (RDBMS)

- Not every database application must run on Oracle
- But try to keep your environment simple

- It's not only about license costs

- Evaluate the database products and your databases carefully before starting a migration project
Questions & Answers

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