Should I stay or should I go ..?

Thoughts before moving to another database platform

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Trivadis – Our key figures.

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- Founded in 1994.

- 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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RAC**SIG**
Real Application Clusters
Special Interest Group

DOAG

DER ORACLE DBA
Handbuch für die Administration der Oracle Database 12c

EXTRA: E-Book inside

HANSER

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Almost everyone wants to migrate

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- 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

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- "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)?

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Possible reasons to leave Oracle ..

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- 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

Political Decisions

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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.

Quelle: https://www.heise.de/newsticker/meldung/Schleswig-Holstein-laeutet-Abschied-von-Microsoft-ein-3849115.html (Oktober 2017)

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

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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)

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	Metrics	Licence (1 time)	Support / Subscription annual fee	
Oracle SE2	Socket	15.194,00 €	3.342,00 €	(2018)
EDB Postgres Standard	Core/vCore	- €	1.225,00 €	(2016)
EDB Advanced Server	Core/vCore	- €	1.750,00 €	(2016)
Server		**4 Cores**	**1 Socket**	
	TCO / 3 years	TCO/4 years	TCO/5 years	
Oracle SE2	25.220,00 €	28.562,00 €	31.904,00 €	
EDB Postgres Standard	14.700,00 €	19.600,00 €	24.500,00 €	
EDB Advanced Server	21.000,00 €	28.000,00 €	35.000,00 €	
Server		**6 Cores**	**1 Socket**	
	TCO / 3 years	TCO/4 years	TCO/5 years	
Oracle SE2	25.220,00 €	28.562,00 €	31.904,00 €	
EDB Postgres Standard	22.050,00 €	29.400,00 €	36.750,00 €	
EDB Advanced Server	31.500,00 €	42.000,00 €	52.500,00 €	
Server		**8 Cores**	**1 Socket**	
	TCO / 3 years	TCO/4 years	TCO/5 years	
Oracle SE2	25.220,00 €	28.562,00 €	31.904,00 €	
EDB Postgres Standard	29.400,00 €	39.200,00 €	49.000,00 €	
EDB Advanced Server	42.000,00 €	56.000,00 €	70.000,00 €	

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

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- 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

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- 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

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(Technical) Decision Criteria

- Compare the databases by feature

- Priorize 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?

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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?

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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 additonal 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 …

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- 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 ..

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- 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

DOAG-Regionaltreffen Nürnberg: Should I stay or should I go?

Summary

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- 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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