Error: Reference source not found

Table des matières

Conduct change from Oracle to PostgreSQL

1 About

» Author : Jean-Paul Argudo jpa@dalibo.com
» Company : DALIBO
» Date : October 4th 2013
» URL : Dalibo Knowledge Base

2 License

- Creative Common BY-NC-SA

- You are free

  - to Share

  - to Remix

- Under the following conditions

  - Attribution

  - Noncommercial

  - Share Alike

3 Agenda

<h2>Switching from Oracle to PostgreSQL</h2>

- Why such a move?
- Mindshift
- A 5-step plan for success

(handout)

4 Why such a move (1/4)

- Money
- Strategy of independence

(handout)

5 Why such a move (2/4)

<h2>Money</h2>

- Have you ever been "audited"?
- (CPU|Cores|Friend|not_Friend)_numbers × instances × [...] = lots of money
- Boats are expensive, you know

(handout)

6 Why such a move (3/4)

<h2>Independence</h2>

- A much better reason

- No more vendor lock-in

- Your PostgreSQL expert has to be good since you can easily replace him now

(handout)

7 Why such a move (4/4)

<h2>Government decisions</h2> **Crisis: .gov guys have to save money and become free**

RÉPUBLIQUE FRANÇAISE
Liberté · Égalité · Fraternité

Le Premier Ministre
5608/SG

Paris, le 19 septembre 2012

à

Mesdames et Messieurs les ministres

<u>Objet :</u>   Orientations pour l'usage des logiciels libres dans l'administration

6.2.2.3. MimBD

Domaine :

- ensemble des logiciels de base de données.

Missions spécifiques :

- favoriser la migration des bases propriétaires vers des bases libres, et en particulier PostgreSQL.

Read it here! (french)

(handout)

8 Mindshift (1/4)

<h2>From Editor to Community</h2>

- No one editor accountable for everything
- Our community is composite (individuals, non-profit groups, and businesses) and no vendor to shout at
- No all-in-one solution. No CDs. No DVDs.
- But OTOH: lots (and lots) of ways to do things

(handout)

9 Mindshift (2/4)

<h2>License costs to Service costs</h2>

- PostgreSQL may not be cheaper than Oracle
- ...at least not at first (ROI > year(s))
- License costs → Service costs
- Maintenance costs remain (Support)

(handout)

10 Mindshift (3/4)

<h2>Technical caveats</h2>

- Oracle RAC? ⇒ Postgres-XC: **version 1.1**
- Materialized views? ⇒ PostgreSQL 9.3: **september 2013**
- Partitionned tables? ⇒ Still a lot of work to do there (despite pg_partman which helps)

(handout)

11 Mindshift (4/4)

<h2>Innovation</h2>

- PostGIS, long-time award winner for spatial databases (IGN casestudy: Oct 2006!)
- Strong conformity with the standards (ANSI-SQL:2008 and 2011)
- State of the art features: JSON, PLV8, Window functions and CTEs, LATERAL, SQL-Med, Foreign Data Wrappers, etc.

(handout)

12 A 5-step plan for success (1/10)

<h2>Studies</h2> **Learn about the PostgreSQL ecosystem**
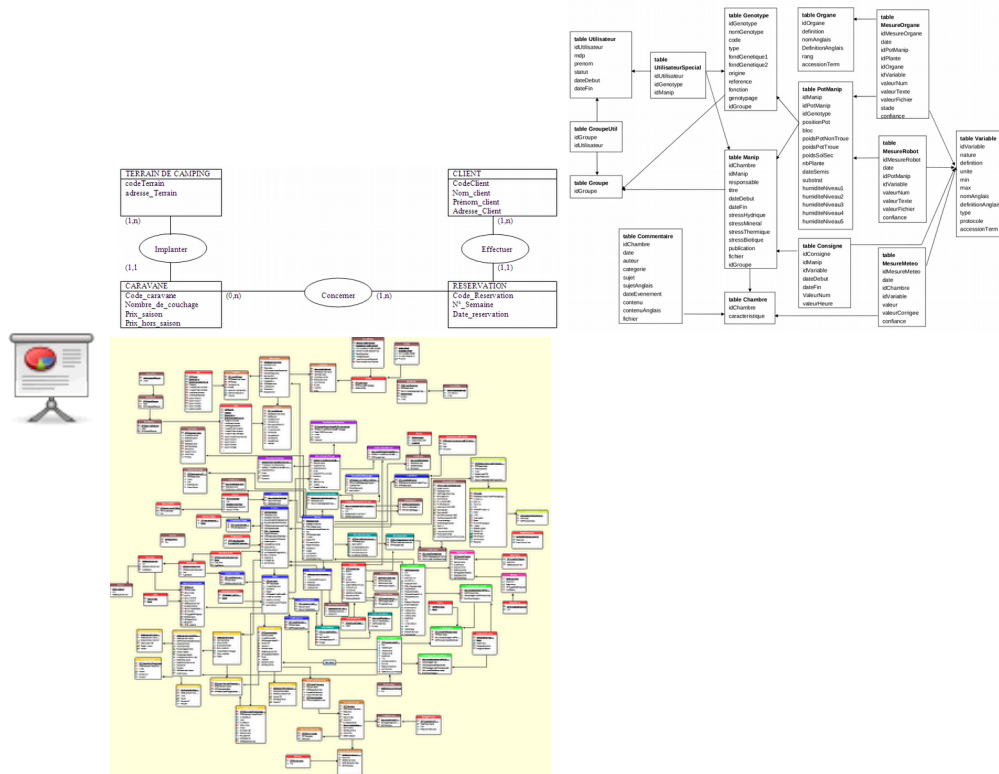
DALIBO

(handout)

13 A 5-step plan for success (2/10)

<h2>Studies: POC (1/2)</h2> **Choose an application and make a POC, depending on the context**

How to choose it?

(handout)

14 A 5-step plan for success (3/10)

(handout)

15 A 5-step plan for success (4/10)

`<h2>Studies: Tools</h2>`

- Ora2Pg features among others:
  - Migration cost assessment of an Oracle database.
  - Migration cost assessment of PL/SQL code from a file.
  - Migration cost assessment of Oracle SQL queries stored in a file.
- Features sponsored by French Government DGFIP and developed by Dalibo

(handout)

16 A 5-step plan for success (5/10)

`<h2>Training</h2>`

- Your Oracle DBA(s) rox
- You can convert them to PostgreSQL in 1 or 2 weeks
- 1 week for all other profiles (devs, sysadmins, project managers, etc)
- Beware of the **lack of PostgreSQL profiles**

(handout)

17 A 5-step plan for success (6/10)

<h2>Industrialization</h2>

- Build your own stack **based on your studies**
- You can *copycat* the existing Oracle stack
- ...or not. You can also make it better.

(handout)

18 A 5-step plan for success (7/10)

<h2>Migration: start gently</h2>

(handout)

19 A 5-step plan for success (8/10)

<h2>Migration: Tools</h2>

- Ora2Pg again...

- Quite magical but: *"Ora2Pg does its best to automatically convert your Oracle database to PostgreSQL but there's still manual work to do. The Oracle-specific PL/SQL code generated for functions, procedures, packages and triggers has to be reviewed to match the PostgreSQL syntax."*

- Sample: "204.5 cost migration units means approximatively 3 man-days"

- Reality hurts sometimes: "31154.8 cost migration units means approximatively 371 man-days"

(handout)

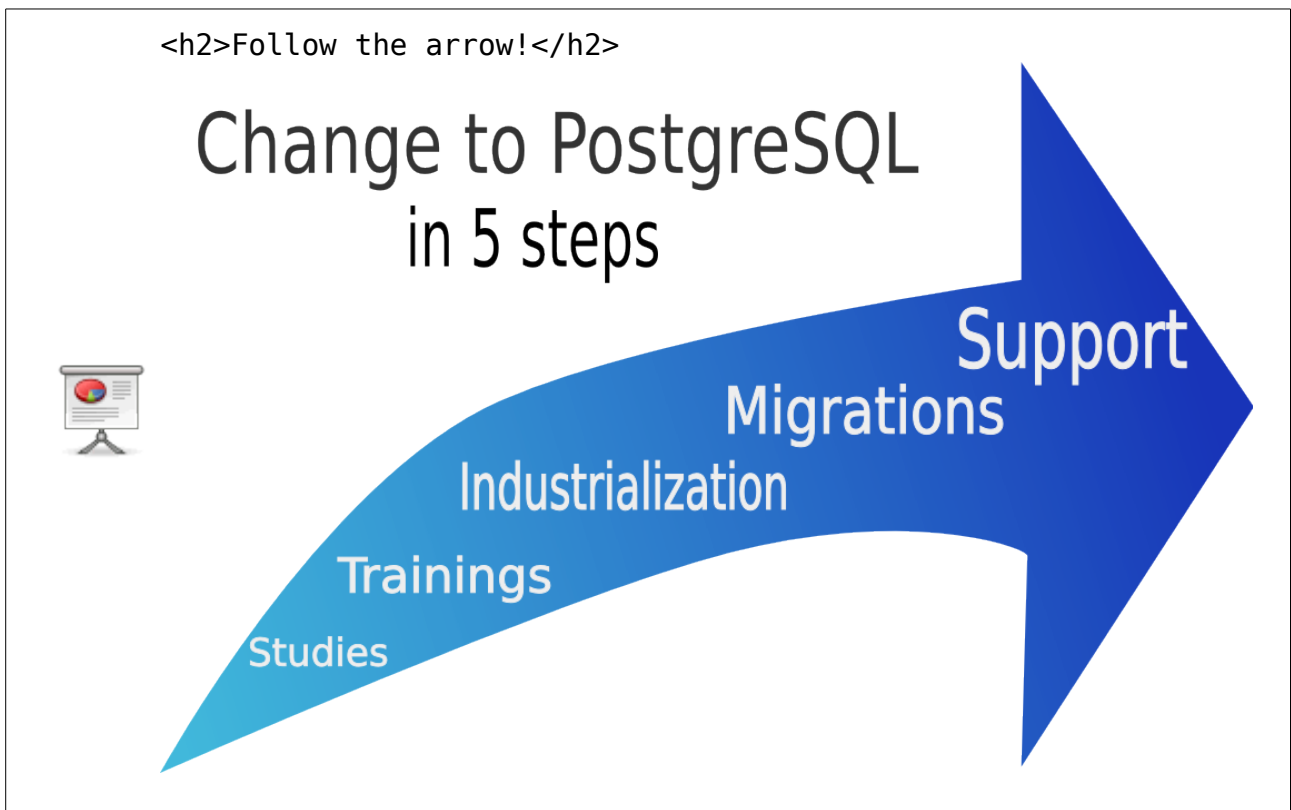# 20 A 5-step plan for success (9/10)

<h2>Support</h2>

- Internal skills or external?

- Depending on your strategy, the offers exist

- From classic hotline to proactive services

(handout)

21 A 5-step plan for success (10/10)

```
<h2>Follow the arrow!</h2>
```

Change to PostgreSQL
in 5 steps

Support

Migrations

Industrialization

Trainings

Studies

(handout)

22 Questions ?

- This talk will become a "white paper" soon
- Look at dalibo.org
- More questions? e-mail me: jpa@dalibo.com
- Follow me on twitter: @jpargudo

(handout)