LHC Database Developers' Workshop (2D)

January 24 – 28 2005, CERN

Overview

- Background to the workshop
- Goals & Motivation
- How to get your Tom Kyte book
- Who is this Tom Kyte person anyway?
- Next steps

Background

- A number of discussions, initially with LHC online community, revealed significant number of new database applications, and developers, in the pipeline
- Meeting in October 2004 with offline and online representatives from all 4 LHC experiments led to proposal of Database Developers' Workshop
- This is it!
- Significant amount of preparation by many people
- Please profit from it – and not the wireless network
- Silencing your mobile phone would be much appreciated…

Goals & Motivation

- We are (finally) very close to LHC startup
- Many new projects coming along
- There is simply no time to waste!
- Non-optimal (DB) applications are very expensive to 'fix' *a posteriori*
- Try to establish some basic 'best practice' guidelines
- And also well defined *dev* → *integration* → *production* path

How to get your book

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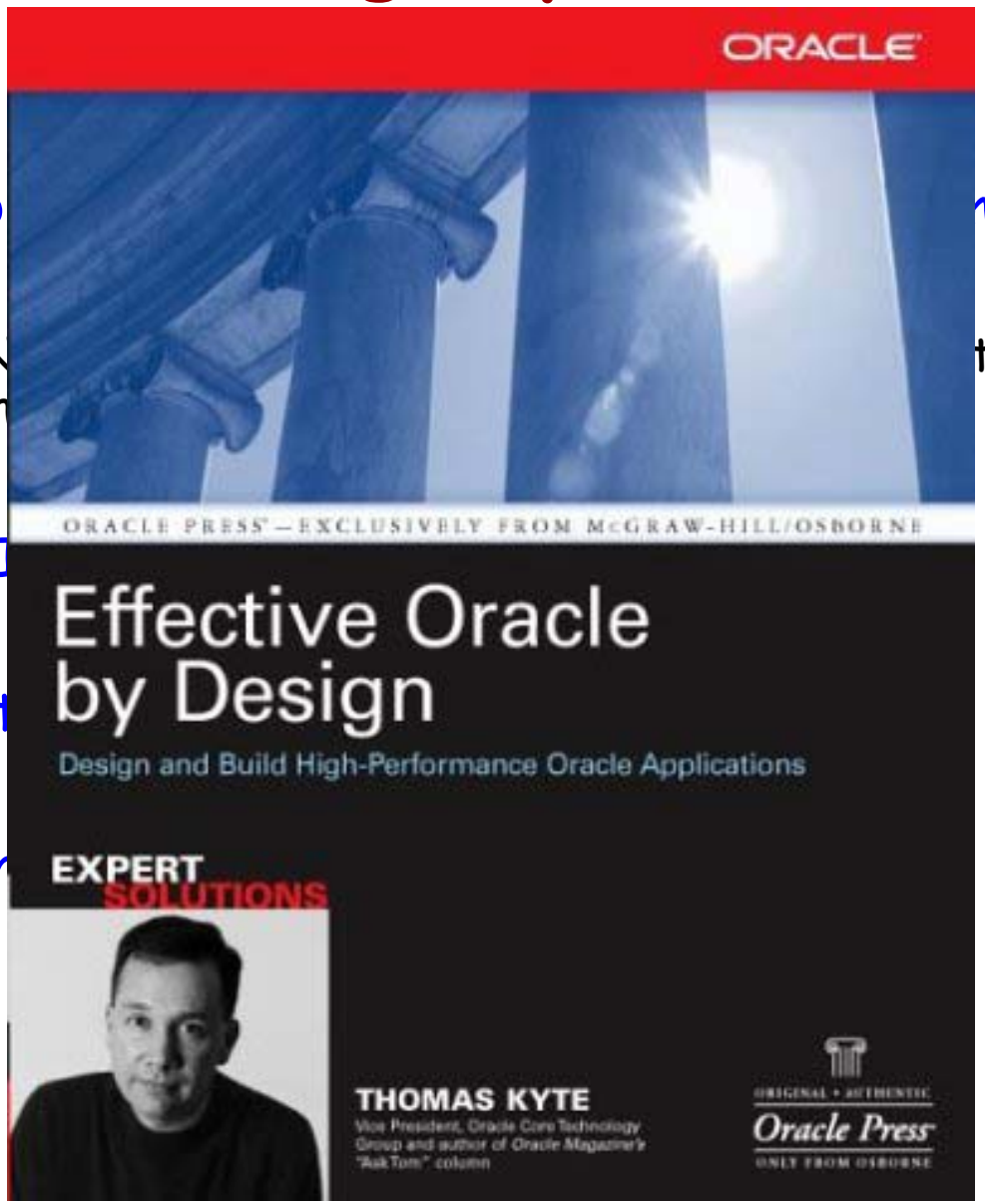

Who is Tom Kyte?

- One of the world's best experts on Oracle technology
- Frequent, excellent speaker at Oracle events
- Behind the 'Ask Tom' website – http://asktom.oracle.com/
- ***Can he really answer all those questions himself?***
- Regular articles in Oracle Magazine
- And he's coming here – next week!

Next steps

- Computing Colloquium series Thursday 3 – Friday 4 February
- Based on seminar series that Tom will give in NL the following week
- Will be held in Council Chamber
- Volunteers to help organise experiment visit please!

The End

Backup Slides on Contract Follow

(Based on previous FOCUS / Desktop Forum / Experiment presentations)

Oracle Contract

- Previously based on "active users", auditing via CERN tools
- Highly non-standard; obsolete list of products and machines
- Maintenance costs were growing at 15% compound

- New contract based on "named users" (standard Oracle license)
- Platform independent
- Location independent
- iAS licenses dramatically increased
- Maintenance costs reduced and are fixed for 5 years
- Extended to "all CERN staff + users" (HR numbers)
- s/w can be installed and run at collaborating institutes for CERN work

- Double edged sword – support issues for outside use a big concern

Oracle Distribution

- Users (sites) must register (group OR) and sign contract addendum
- Oracle DB and iAS packaged and redistributed as basis of file (metadata) catalog for LCG
  - Well-defined application, well shielded from users
  - Defined version of Oracle components, single supported platform (RHEL)
  - Tools / kits now used within the IT-DB group for CERN services
  - Also at a few Tier1 sites (CNAF, FZK, RAL, …)
- First non-LCG customer: COMPASS
  - Offload significant(?) fraction of their production / analysis
  - Requires local Oracle expertise
  - Bulk data distribution: few times per year "transportable tablespaces"
- Requests from other groups in queue; proceeding at rate we can support without impacting CERN production services
  - Not targeting general purpose DB services outside (Yet? Ever?)

Other Oracle Distributions

- Client run-time
  - Based on Oracle 10g "instant client"
  - "Light weight" instant client (small VM footprint) also agreed
- Client developer
  - Requested to Oracle … now available
- Neither of the above work-items currently scheduled
  - RLS kit not really suitable just for client usage…
- Big concern is additional support load
  - Need to reproduce problem at CERN? Beyond that?