Tuning COMMIT

Do you have a commitment problem?

SKILLBUILDERS

COMMIT: the ultimate bottleneck

- What happens when you COMMIT?
  - A COMMIT record goes into the log buffer
  - Your session hangs on LOG FILE SYNC
  - The log buffer is written to disc
  - You session wakes up
- You cannot do DML faster than log writer can write
  - Reduce redo volumes and COMMIT frequency, perhaps?
  - Tune up the hardware so that writes are quicker?

The COMMIT write is tuneable

- Default: COMMIT WRITE IMMEDIATE WAIT;
  - IMMEDIATE: log writer writes straight away
  - WAIT: your session hangs
- The alternative: COMMIT WRITE BATCH NOWAIT;
  - BATCH: the log writer need not take immediate action
  - NOWAIT: your session carries on working
- Can also set with parameters
  - commit_logging
  - commit_wait

To conclude

- Possible issue:
  - In extreme circumstances, you could lose a transaction
- In an ideal world, you would tune the application
  - Think about transaction structures
  - Use NOLOGGING where possible
- Tuning the COMMIT process can be very effective
  - Eliminates a whole class of wait events
  - No need to touch the application software