



Logging and Recovery

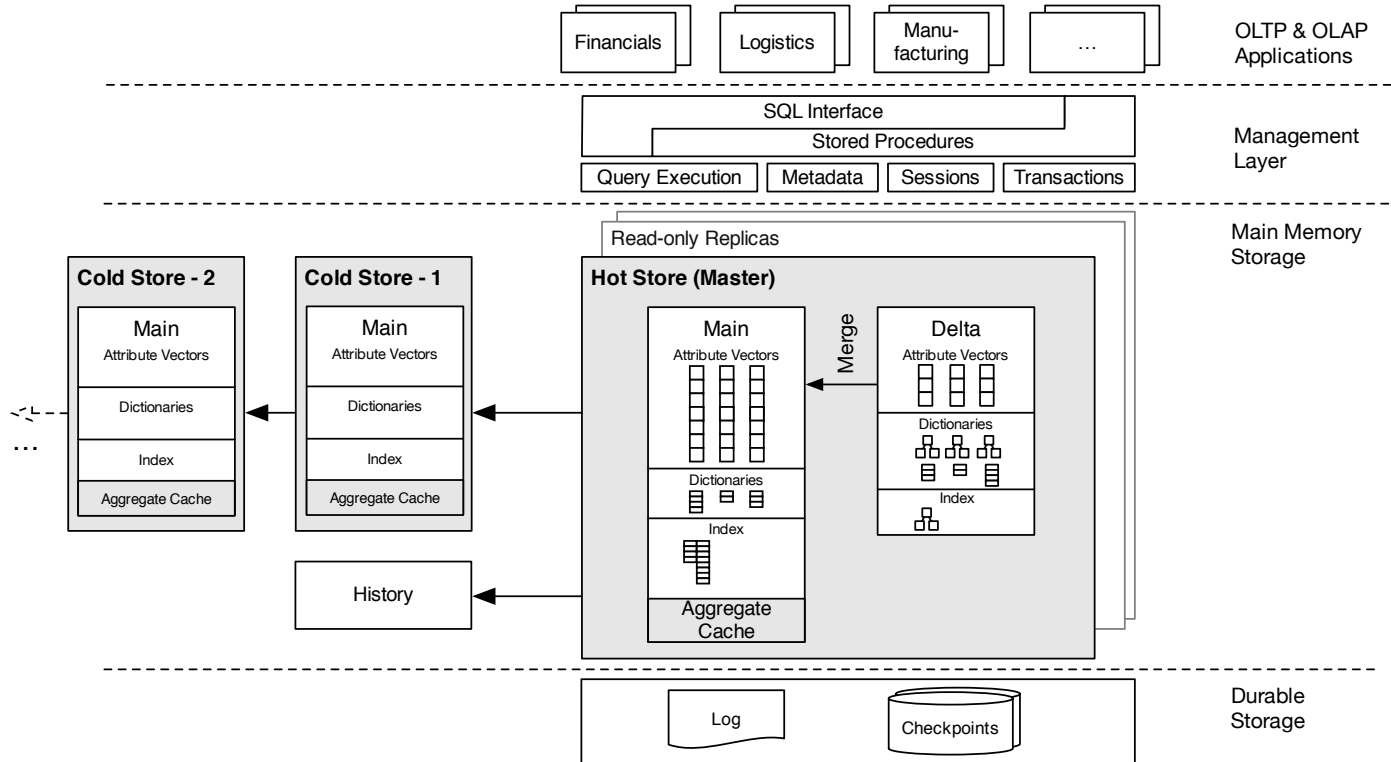
- Definition of Logging and Recovery
- Classification of Logging Approaches
- Logging in IMDBs
- Checkpointing

**Logging and
Recovery Overview**

Databases need to provide durability guarantees to recover from failures

- Transaction failure: aborted transaction by DBMS or application
 - System failure: bug in DBMS/OS or hardware failure
 - Media failure: data loss or corruption on non-volatile storage
-
- **Logging:** writing log information to persistent storage to enable recovery
(with minimal impact on running system)
-
- **Recovery:** process of bringing a system back to a productive mode after a system failure
(as fast as possible)

Logging and Recovery



Logging and Recovery Overview

Slide 4