Extreme Performance with In-Memory Database Technology – Real Life Stories

Presented at Oracle Open World
Ericsson Charging System

Jim Håkansson
(Senior Specialist Software Development)
Ericsson, Sweden
Revenue Management
Do NOT turn off
Mobile Phone Statistics

- 6,800,000,000 people in the world
- 5,000,000,000 subscriptions
- 2,000,000,000 has access to PC
- 20% are Charged via Ericsson
What is Mobile Phone Charging System

**Rating**
- Calculate Price
- Promotions and Loyalty

**Accounting**
- Spending Control
- Multi Account
- Multi Units ($, min., byte, SMS)
- Historical Usage
Non Functional Characteristics

**Performance**
- Real Time
- # msec response time

**Availability**
- Telecom Grade
- 99.999% (max down 5 min/year)
- Quick and Automatic Failover
How is it done

**High Performance**
- In-Memory Database
- Quick Queries
- Predictable Response Time
- ACID

**High Availability**
- Share Nothing Cluster
- Replication
- LAN and WAN
Key Features in TimesTen

› High Performance
  - In Memory

› Standard Interface
  - SQL
  - JDBC/ODBC

› Low Maintenance
  - No DBA needed

› Wide Hardware/OS support

› Low System Impact