Cluster/J

Sun's new set of Java APIs for MySQL Cluster 7.1

History of Java NDB API mappings

- **NDB/J** – Jim Dowling, 2006
- **NDB-Bindings** – Monty Taylor, 2007
  - > swig-based
- **This project** – Craig Russell, Martin Zaun, others
  - > JTie
  - > NDB JTie
  - > Cluster/J

Cluster/J and NDB JTie

- **JTie**: a framework for mapping **any** C++ API to Java
  - > based on C++ templates
  - > ... and Java generics
  - > ... and "type-driven mapping"
  - > ... and standard tools (javah)

- **NDBJTie**: Java mapping of the NDB API (a complex class hierarchy with 700 methods)

- **Cluster/J:** *Simple Object-Relational Mapping for NDB*
  - > Based on NDB-bindings or NDBJtie (for now)
  - > Implements *OpenJPA / JDO*
  - > Transaparent fast path (NDB) / slow path (JDBC)

How big are the frameworks?

- **NDB-Bindings**
  - \> swig description files not hard to manage
  - \> *Generated code: 60,000 lines*
    - – 40,000 lines of c++ (including 20,000 line ndbj.cxx)
    - – 20,000 lines of Java

- **JTie**
  - \> 2,5000 lines implementation
  - \> 14,000 lines of test

- **NDB JTie**
  - \> 9,000 generated lines of code