Condor Java Daemon Core -
JMS Job Event Notification

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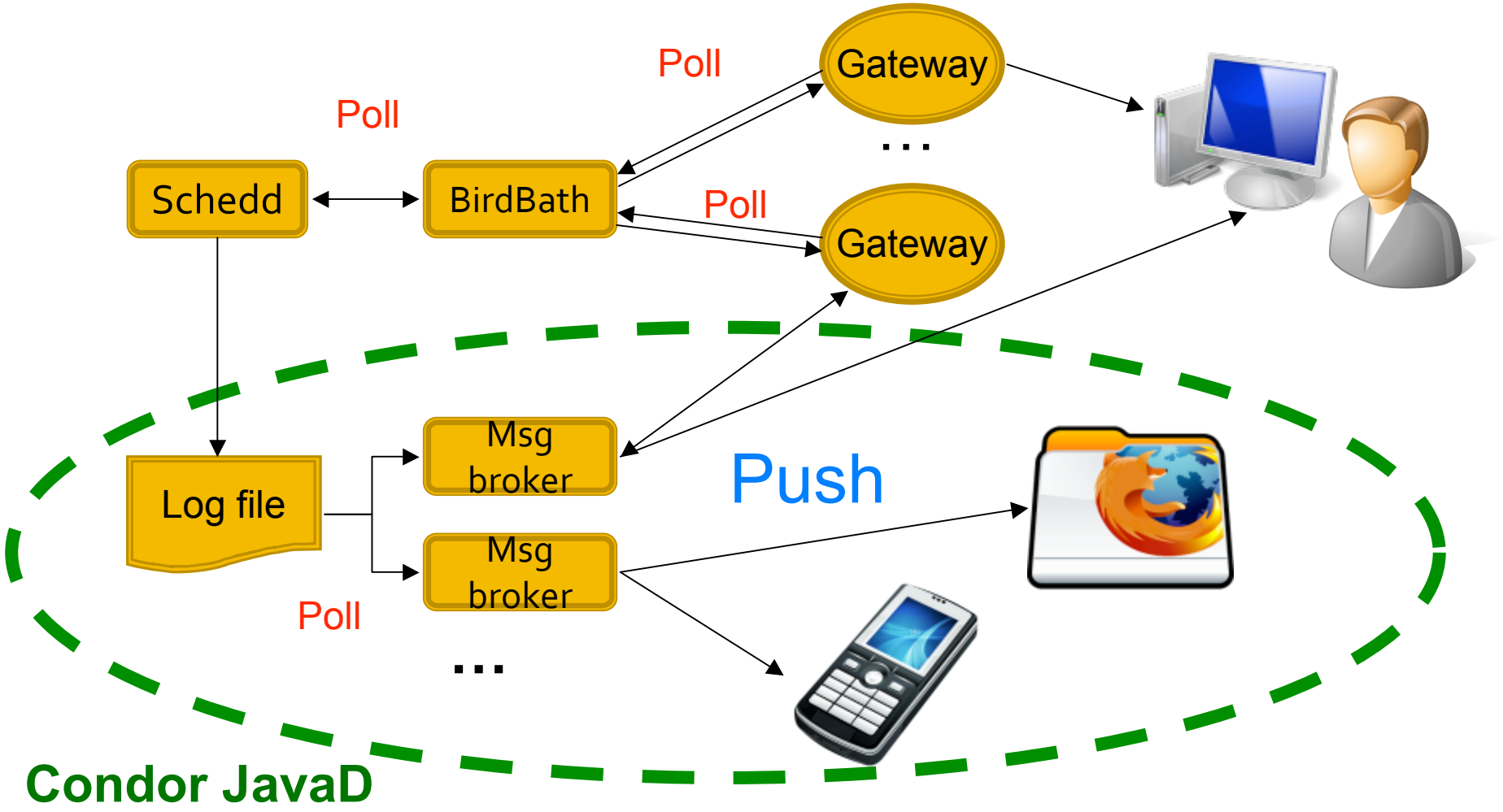
Project Overview

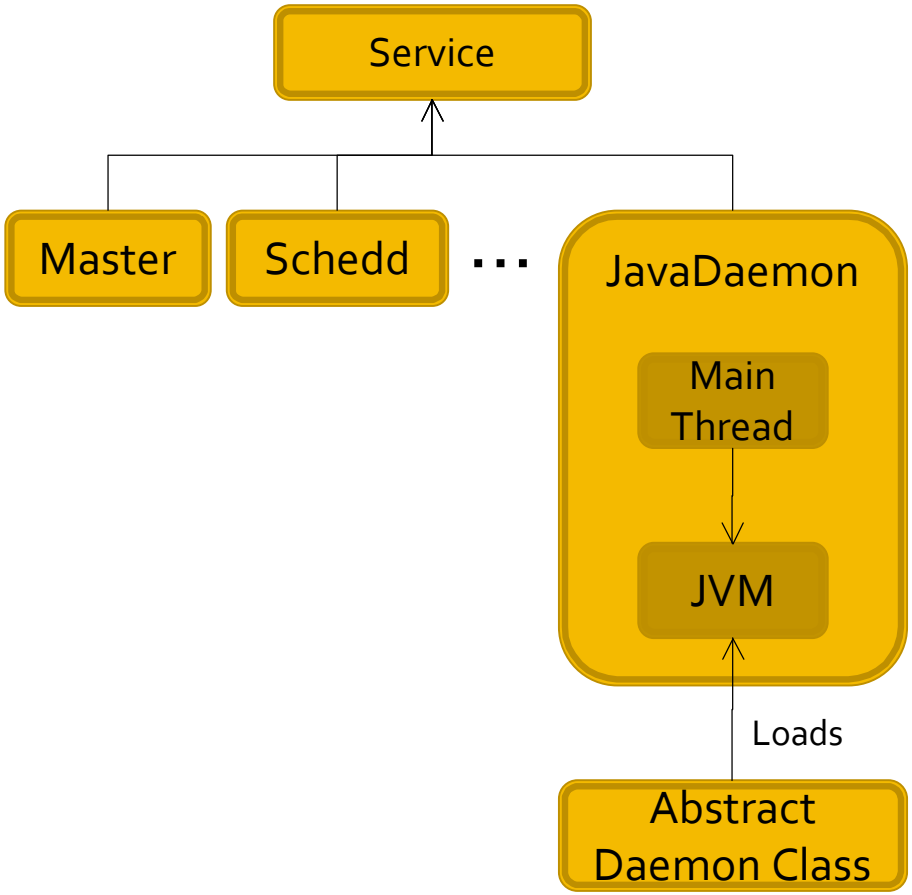
- Java Daemon Core
  - Common way to create condor daemons for java.
  - Defines an abstract class and flexibility.
  - Condor daemon management.
- JMS Job Event Notification
  - Asynchronous notification of job events.
  - Removes the need for polling.
  - For the time being publish only.

Architecture Overview



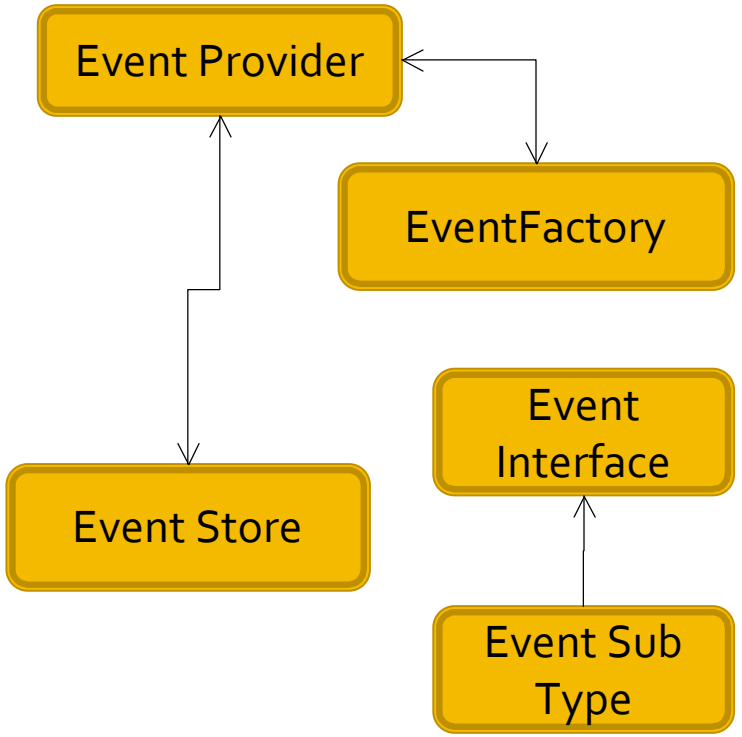
Java Core Daemon

- Daemons
  - Use DaemonCore class
  - Extends Service class
- Java Daemon Core
  - JNI Implementation of Daemon Core
  - C++ base class runs to handle signals
  - Launches JVM through JNI
  - Loads and calls an implementation of AbstractDaemonClass.java



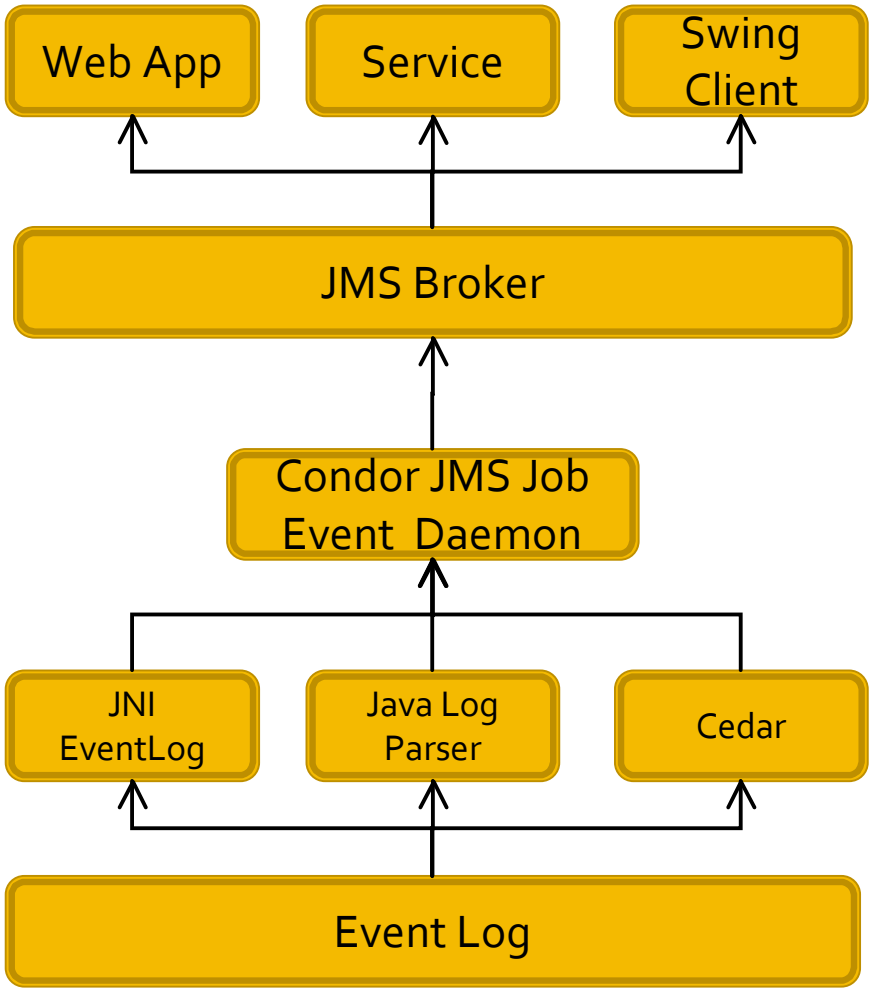
Job Events

- Event Interface
  - Sub Types
- Event Factory
  - Creates Sub Types from serialized form
- Event Store



JMS Job Event Notification

- JMS Event Daemon
  - Publish to a JMS event broker.
- JMS Broker
  - Notification replication
  - Order and Persistence
  - Security and Guaranteed delivery
- Clients and standards
- Multiple event fetchers planned.



Current Issues and the Future

- Thousands of events per second!
  - JNI memory speeds
  - Multiple ways of fetching event data.
  - Event sub type matching with C++ version. Considering auto generated solutions.
- JMS Broker Scaling.
  - Clustering will be considered.
- Multiple client interface examples.
- If this will survive in our environment it should work anywhere.