

Advanced Systems Lab - Design

Lukas Elmer, Matthias Ganz

September 23, 2013

Table of content

Overview

Database

Messaging System

Client

Communication Protocol

Management Interface

Measurements

System Overview

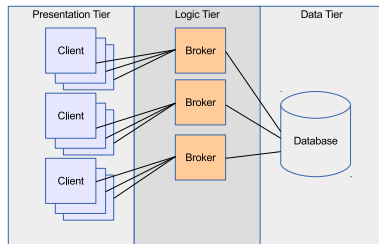


Figure : System Overview

The messaging system utilizes a single database instance. On the logic tier multiple broker instances may be running. Each broker serves a certain number of clients.

Database Schema

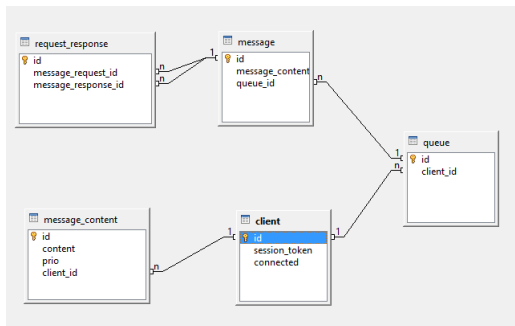


Figure : Database Schema

Server

- ▶ Threading
- ▶ Java NIO Reactor

Client to Broker Communication

Describe Communication between clients and broker

- ▶ simplified http, only http post
- ▶ xml over http with fixed content-length

Client

- ▶ May be implemented as a simple html page running in any browser

Communication Protocol

Communication Protocol used by client and server

Management Interface

Use JMX?

What experiments are performed

1. what kind of experiments are performed
2. how to perform measurements
3. where to store measurement results (Format, Use DB, etc)