Benchmarking of FIXEdge Java 1.9.0

Hardware

Client host (epam1)

- Intel(R) Xeon(R) CPU E5-2687W v3 @ 3.10GHz (2 CPU Hyper-Trading Enabled, 20 Cores)
- RAM 128 GB, 2133 MHz
- NIC Solarflare Communications SFC9120 (Firmware-version: 4.2.2.1003 rx1 tx1)
- Linux (CentOS 7.0.1406 kernel 3.10.0-123.el7.x86_64)
- SolarFlare driver version: 4.1.0.6734a

Server host (epam2)

- Intel(R) Xeon(R) CPU E5-2643 v3 @ 3.40GHz (2 CPU Hyper-Trading Enabled, 24 Cores)
- RAM 128 GB, 2133 MHz
- NIC Solarflare Communications SFC9120 (Firmware-version: 4.2.2.1003 rx1 tx1)
- Linux (CentOS 7.0.1406 kernel 3.10.0-123.el7.x86_64)
- SolarFlare driver version: 4.1.0.6734a

Description

Single Session Echo Scenario

- FEJ has one acceptor session configured on server host.
- Client application has one initiator session configured on client host.

The overall process is following:

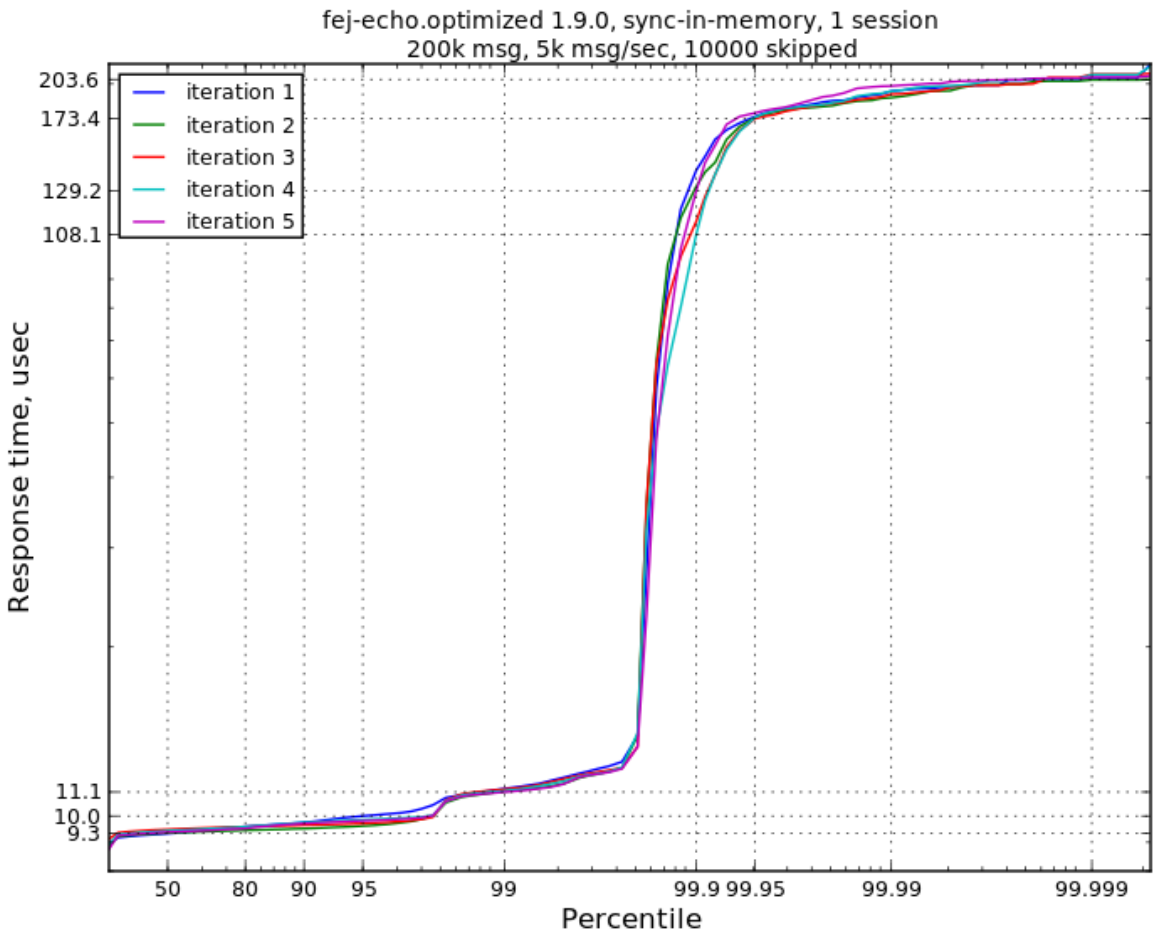
1. Client application connects to the FEJ instance and sends 200000 FIX 4.2 messages with a rate of 5000 messages per second.
2. FEJ receives the messages and matches it to the same session using business layer logic.
3. FEJ responds to the client application with the same message in the same session.

The response time measured by client application is the difference between timestamps:

- t1 - timestamp taken right before sending message to client session;
- t2 - timestamp taken right after received the same message in client back from FEJ.

The round-trip time formula is: RTT=t2-t1 and measured in microseconds.

Results



	Single session, usec
Min	8.744
Max	206.719
Median	9.383
Average	9.65565
50%	9.383
75%	9.487
90%	9.719
95%	9.823
99%	11.031
99.9%	123.967
99.99%	198.143