



Intel Quad Core drives 1 million events per second with microsecond latency for BEA WebLogic Event Server

Overview

BEA WebLogic Event Server is a lightweight, Java-based (non-J2EE) application server designed specifically to support event driven applications. Event driven applications in financial services are frequently characterized by the need to provide low and deterministic latencies while processing extremely high rates of streaming market data. Latency presents unique performance challenge that are quite different from those faced by more traditional application servers that tend to focus on obtaining the highest possible throughput for transactional workloads.

BEA WebLogic Event Server on Intel Xeon 7350 was able to process an event data rate of 1 million events per second while maintaining microsecond latencies.

The Application

The application used for this benchmark study implements a front office Signal Generation scenario in which the application is monitoring multiple incoming streams of market data watching for the market conditions that trigger action. This is a very common scenario in front office trading environments. At an injection rate of 1 million events/sec the average event latency was 67.3 microseconds

BEA and Intel – Uniquely Positioned for Low Latency

BEA WebLogic Event Server (WLEvS) is a low latency complex event processing application server that runs best on Intel Quad-Core. The latency solution builds on the hardened optimized stack jointly developed by Intel and BEA. The joint solution has been in production 5+ years winning the SPEC JBB benchmarks for over 3 years.

Test Environment

The hardware used in the testing consists of one machine for the event server and one machine for the load generator. The server and load generator machines each have an identical hardware configuration and identical software stack as described below:

Intel Quad-core Caneland Platform
4 quad-core Intel X7350 2.93 GHz processors

8 MB L2 cache per processor, shared across the 4 cores
32 GB RAM

OS: Red Hat Enterprise Linux 5.0, 32 bit.

JVM: BEA WebLogic Real Time 2.0

CEP Engine: BEA WebLogic Event Server 2.0

More Information

Download performance whitepaper: www.bea.com/eventserver

