

## TransactTools TCM5 Trades Volumes on Solaris 10

### Company

- TransactTools, Inc.

### Vertical Market

- Financial Services

### Key Challenges

- Boost application performance to support the exponential increase of electronic trading volumes in the financial services markets.

### Business Results

- TransactTools' TCM5 server can process over 30,000 messages per second when running on a Sun Fire™ V20z server featuring the Solaris™ 10 operating system and dual AMD Opteron™ processors Model 248 (2.2GHz) — making TCM5 one of the fastest products of its kind.
- The Solaris 10 operating system running on Sun Fire servers is a platform TransactTools can recommend to customers for its superior performance, competitive pricing, and rock-solid support.

In the financial services industry where timing is everything, a Sun Fire™ V20z system with AMD Opteron™ processors running the Solaris™ 10 OS drives TransactTools' TCM5 transaction connectivity server 50 to 200 percent faster than similar systems running Windows or Red Hat Linux.

It's no wonder TransactTools is recommending the Solaris 10 operating system running on Sun Fire v20z systems with AMD Opteron processors to its customers.

### Java™ Technology-enabled Solution Is Unmatched in the Market Place

Founded in 2001, the New-York-based TransactTools' transactional connectivity solutions have quickly spread to many of the world's leading brokerage firms, security exchanges, and financial institutions, including Citigroup, Archipelago, CME, Banc of America Securities, Bear Stearns, and UBS. One reason for its success is TransactTools' TCM5 — the only product of its kind proven to handle transaction volumes exceeding 30 percent of NASDAQ's daily trading activity.

An integrated platform providing enterprise transactional connectivity management, TCM5 includes a high-powered messaging engine that can support the trading activities of a few brokers or an entire exchange. Other TCM5 tools include sophisticated administrative applications for transaction analysis and repair, real-time alerting and notifications, and business exception management. Written wholly using Java™ technologies, TCM5 supports numerous middleware messaging architectures and financial protocols, including FIX, CMS, and TWIST.



## TCM5 Benchmark Performance Test Results

“Solaris 10 on AMD Opteron hardware is one of the fastest performing Java platforms in the market. For most combinations, Solaris 10 outperforms Windows and will match or beat the performance of Linux.”

**Sam Johnson**

President and CEO, TransactTools

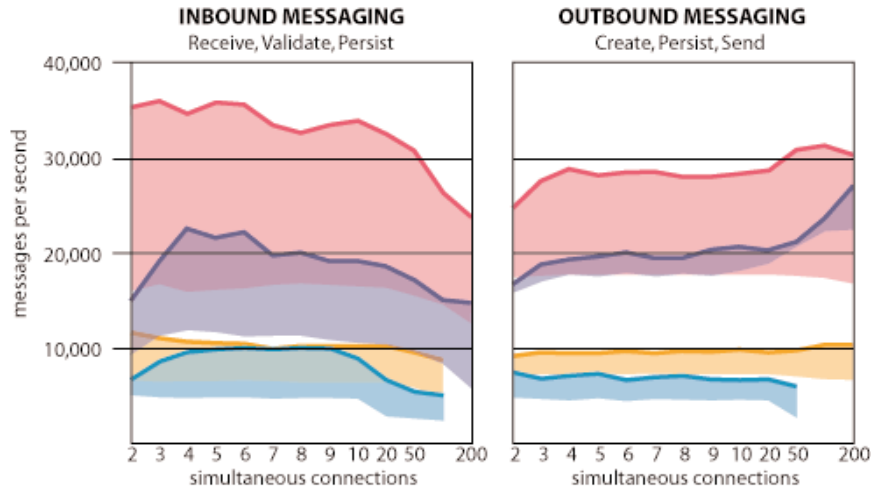
One of the biggest challenges facing organizations involved in electronic trading is supporting the exponential increase in volume. Not only is electronic trading growing in popularity, algorithmic or black box equity trading can generate thousands of orders per second, and customers want their decisions reflected in real time. To help meet organizations’ requirements, TransactTools profiles and tunes all of its products on a variety of operating systems to deliver optimum performance.

**Faster Trading on the Solaris 10 OS**

TransactTools recently conducted a series of benchmark tests on the Solaris 10 OS, measuring the throughput and latency of business messages routed through TCM5 at high volumes. The tests evaluated the platform on various hardware architectures and Java™ virtual machines (JVMs™).

TransactTools found the optimum configuration to be TCM5 running on a Sun Fire V20z server featuring dual AMD Opteron™ processors Model 248 (2.2GHz), the Solaris 10 OS, and Sun JVM 1.5.0 software. The combination blew the competition away — driving TCM5 approximately 200 percent faster than on Windows, and 50 percent faster than on Red Hat Linux ES.

“Solaris 10 on AMD Opteron hardware is one



	Operating System	CPU	JVM
	Sun Solaris 10	Dual-AMD Opteron Processors, Model 248 (2.2GHz)	Sun 1.5.0
	Red Hat Linux ES 3	Dual P4 Xeon, 2.8GHz	JRockit 1.4.2
	Sun Solaris 9	Dual UltraSPARC® III, 1GHz	Sun 1.5.0
	Windows 2003 Server	Dual P3, 733MHz	JRockit 1.4.2

of the fastest performing Java platforms in the market,” stressed Sam Johnson, president and CEO of TransactTools. “For most combinations, Solaris 10 outperforms Windows and will match or beat the performance of Linux. We have achieved some of the best numbers in the industry on Solaris 10. Financial services customers generate thousands of orders per second. Our software running on the AMD Opteron platforms with Solaris 10 is the only solution I know of in the industry that can scale to over 30,000 messages per second today.”

“In another test, Red Hat Linux performed comparably to Solaris 10 when running on the same hardware platform — dual 2.2GHz AMD Opteron processors,” said David Litner, vice president of engineering at TransactTools. “Clearly the benefit of going with Solaris 10 over Linux is that you have a company like Sun Microsystems standing

behind it. While there are many companies that offer services and support for Linux, the wide variety of versions and features complicate development — unlike Solaris which Sun controls. . . .”

Johnson adds, “Solaris 10 is also an attractive alternative to other operating systems such as Linux because of its sophisticated management tools and utilities, such as DTrace.” “And the fact that Sun’s solution is comparable in price to a Linux system is another welcome aspect of Solaris 10,” notes Litner.

“Since our customers are extremely performance sensitive, we will continue to work with Sun to provide high-performance messaging and real-time monitoring tools to the financial services industry,” concludes Litner. “Solaris 10 is a great platform to run our software on. We see it as an enabler to the financial services industry.”

