

## Solaris Advanced Features & Migration Practice

# Application Optimization Guarantee (AOG)

### At a Glance:

- Optimize your Solaris™ 10-capable application by at least 20% with our AOG<sup>SM</sup> service or the engagement is FREE
- Drive improvements with Sun Microsystems' innovative DTrace tool and guidance from Forsythe professionals
- Reduce latency at individual interface points to increase speed and improve efficiency of your overall application
- Realize true cost-savings and increased profitability

### When it Comes to Optimizing Application Performance, Every Millisecond Counts

You know that application latencies are typically measured in milliseconds. You also know that unwanted latency affects your profitability. When you are running an application to support your business, performance is integral to your productivity, customer satisfaction, potential growth and ongoing success.

**Our Guarantee: Forsythe will improve any Solaris 10-capable application by at least 20% or the engagement is FREE.**

### The Opportunity

Every application request, or use case, must interface with various software layers: the operating system, vendor-delivered libraries, databases, drivers, physical layers and more. As a request moves through a system, unwanted latency is often introduced. Within any application, there are hundreds, sometimes thousands of points where performance inhibitors can occur. Therefore, performance optimization becomes even more complex due to the plethora of toolsets needed to identify various software pathologies.

Many organizations have tried to solve their long-standing systemic problems with application-specific tools. However, due to limitations of these tools, companies could not realize the full potential of performance optimization—until now.

### DTrace—The Right Tool for Optimization

DTrace allows for dynamic observability of an entire production system in order to collect arbitrary data about applications, the operating system and dependent libraries.

Forsythe's AOG service provides the strategic guidance of world-renowned experts who have worked with DTrace since the beginning.

### Forsythe's Approach to Application Optimization

#### PHASE I

**Baseline and Profile:** Forsythe will work with your application team for a one-day, on-site engagement to establish a performance baseline of the application(s) or environment you would like to optimize.

#### Deliverables

Optimization service proposal including:

- Baseline performance
- Optimization forecast
- Key metrics related to your business

#### PHASE II

**Optimize:** A Forsythe professional will typically conduct a 2–3 day, on-site engagement to optimize your system.

#### Deliverables

- Implement remediation strategies
- Validate performance improvement
- Provide executive summary and detailed analysis with recommended changes

## Global Trading Firm Profits from AOG

### Situation

A large, diversified investment and trading firm depends on its state-of-the-art technology and rapid time-to-market for continued success and growth.

Recently, this company discovered that on heavy market days, its price server was unable to process the number of messages it received, thus resulting in trader concern and numerous missed trading opportunities. At the same time, the firm hoped to find ways to optimize their computing environment for additional throughput without increasing their data center footprint or power capacity.

Not only was the existing situation challenging, but the company also had plans for expansion—with the need to implement three times as many trading strategies without adding servers.

After the organization attempted several “self-help” techniques to improve their system performance—rewriting application code, modifying hardware and even trying DTrace—they decided to engage Forsythe.

### Forsythe Involvement

Forsythe worked with the trading firm’s application team to establish a performance baseline. This included a full understanding of all critical application points, such as history, language, platform type, patch levels, workload profile, known performance problems and more.

Forsythe evaluated the system as a whole, including important areas like kernel resource utilization, application implementations and library interaction to identify specific areas of latency.

The trading firm evaluated the impact of performance issues to their business and then decided that a 25% performance improvement would result in a significant monetary gain for their operations. Forsythe committed to improving the firm’s instrument server application by their desired percentage.

### Measurable Results

Forsythe exceeded the desired increase in performance, increasing message throughput by 26%.

What does this mean to the trading firm? It will be better able to meet its needs during heavy market trading days (without extra space and power), executing more trades and implementing additional trading strategies, thus directly increasing their overall opportunity for profitability.

*“Every business-critical application can realize improved performance. Previously, solving performance problems was exceedingly difficult because the appropriate tools didn’t exist or were too narrow in their usability. Now—thanks to DTrace—we can focus on solving problems and not on data collection.”*

– Jarod Jenson, Chief Technology Architect, Forsythe

## Get the Forsythe Advantage.

For more than 35 years, Forsythe has delivered forward-thinking advice, technology, and operation-enhancing solutions. As an IT infrastructure integrator, Forsythe can help you address every aspect of your infrastructure, including how new solutions may affect the bigger picture. Working with every major provider, Forsythe acts as your single point of contact for managing the cost, effectiveness and risk related to your information systems.

## Let Forsythe Help.

Business objectives—and business issues—don’t exist in a vacuum. Forsythe identifies and addresses IT interdependencies to deliver solutions that work across your enterprise. Call us today.

