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Sun Microsystems Is A Strong Performer In Application Server Platforms

The Forrester Wave™ Vendor Summary, Q3 2007

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EXECUTIVE SUMMARY

What a difference 18 months makes. Sun Microsystems trailed the field in our 2004 evaluation of application server platforms and is a solid Strong Performer in this year's evaluation. Sun's platform grew substantially with its acquisition of SeeBeyond, and the company has spent about a year integrating those products with its Java Enterprise System (ES) modules. The SeeBeyond products, now called the Sun Java Composite Application Platform Suite (CAPS), provide very strong SOA, integration, and business process management (BPM) features relative to the competition. Sun's platform products don't yet have the "extreme battle testing" of IBM and BEA Systems, with the exception of its Web and Directory Servers.

SUN MICROSYSTEMS IS BEST SUITED AS A GENERAL-PURPOSE JAVA-BASED PLATFORM

Sun has a small installed base for its Java ES and CAPS products — about 3,000 companies — but about 1,000 of these companies are new customers, which is a very healthy percentage. Sun did not report the percentage of its Java ES and CAPS customers on maintenance. Sun's developer program has 280,000 members — fewer than its largest competitors.

Forrester evaluated Sun's current offering and strategy for application server platforms against approximately 175 criteria (see Figure 1). Sun's scores were generally comparable to those of BEA Systems, which indicates strong progress in this market. Overall, Sun's platforms have strong support for the latest Java standards, an independent rule development tool, and both BPM and event management tools, but they lack good architectural integration between Java ES and CAPS and advanced caching features. Sun is also one of two vendors (JBoss is the other) to embrace open source licensing, which is of great interest to some buyers. This means that the product is an especially good fit for buyers that:

- **Are building Web and SOA apps using Java and want lower software costs.** Sun's platform is competitive with BEA's on development, deployment, and management features, but it costs less to buy. As noted, Sun is not yet a good choice for applications with extreme reliability, scalability, and complexity. Sun simply doesn't yet have the experience that IBM and BEA do with such requirements. But Sun's Java ES and CAPS suites provide a lower-cost alternative to the other Java platforms with good, solid features.

Java ES and CAPS have strong development tools, support of both the Java and BPEL languages, good openness to other IDEs and frameworks in addition to Sun's NetBeans, and solid metadata management features. However, like IBM, Sun's best tools require extra license costs, as they are not

built into the platform license. In deployment, administration, and management, Sun has strong features for managing composite applications, alert definitions, and composite-application provisioning and upgrades, but it requires too many consoles to deliver these features.

For clients that value availability of platforms under open source licenses, Java ES is available under these terms, and CAPS soon will be.

- **Are looking for an SOA platform.** CAPS has very strong BPM development and deployment features, including support for both business-event and complex-event processing.

To see how Sun Microsystems stacks up against eight other competitors, see the Forrester Wave™ evaluation of the application server platform market.¹

Figure 1 Sun Microsystems Java Composite Application Platform Suite Evaluation Overview

CURRENT OFFERING

Products included	Sun Java Enterprise System (ES) 5, which includes Sun Java System Portal Server 7.1, Sun Java System Portal Server: Secure Remote Access 7.1, Sun Java System Web Server 7.0, Sun Java System Web Proxy Server 4.0.4, Sun Java System Application Server 8.2, 9.1 (GlassFish V2), Sun Java System Message Queue 3.7, Sun Java System Service Registry 3.1, Sun Java System Access Manager 7.1, and Sun Java System Directory Server EE 6.0. Sun Java Composite Application Platform Suite 5.1.2, which includes Sun SeeBeyond eBAM Studio, Sun SeeBeyond eGate Integrator, Sun SeeBeyond elnsight Business Process Manager, Sun SeeBeyond eTL Integrator, Sun SeeBeyond eView Studio, Sun SeeBeyond eVision Studio, and Sun SeeBeyond eWay Intelligent Adapters.
Architecture	The architectural strengths of Sun Java ES and Composite Application Platform Suites (CAPS) are: the broad range of containers (including Java-standard containers, a PHP container, and business process execution language container); the common security, logging, and management services; the identity management features; the wide range of supported UIs; the strong event management features; the availability as source code; and the good product modularity. The architectural weaknesses of Sun Java ES and CAPS are: the reliance on manual methods for user and data state management, the lack of common services for patch management and metadata management, the lack of job-scheduling features, and the availability on a small number of operating systems (OSes). Sun's platform suites are internationalized but available in only five languages.
Scalability, availability, and reliability	In scalability, availability, and reliability, the strengths of Sun's Java ES and CAPS are: the strong out-of-the-box high-availability (HA) features, the ability to isolate application faults, and the backup/restore features. In scalability, availability, and reliability, the weaknesses of Sun's Java Enterprise System and CAPS are: the lack of real-time features, the inability to isolate user faults, the limited caching and clustering features, and the lack of support for compensating transactions and workload managers.
Application development	In application development, the strengths of Sun's Java ES and CAPS are their strong tools, support of both the Java and BPEL languages, openness to other IDEs and frameworks, and solid metadata management features. Unfortunately, Sun's strong tools require extra license costs, as they are not built into the platform license.
Deployment, administration, and management	The strengths of Sun's Java ES and CAPS in deployment, administration, and management are: the features for managing composite applications, alert definition features, composite-application provisioning and upgrades, and availability of suite components on third-party application servers. The weaknesses of Sun's Java ES and CAPS in deployment, administration, and management are the multiple administration and management consoles for composite applications and the inconsistent approach to auditing of composite applications.

Source: Forrester Research, Inc.

Figure 1 Sun Microsystems Java Composite Application Platform Suite Evaluation Overview (Cont.)

CURRENT OFFERING

Standards and interoperability	Sun's strength in standards and interoperability is its aggressive introduction of the latest Java EE 5 specs to market. Sun uses the open source GlassFish project to move quickly to market and then align quickly with its mainline releases. Sun co-developed a .NET interop developer kit based on Microsoft's protocols and is the only vendor to do so. Sun also integrates Active Directory into its Java Access System environments and supports Microsoft Kerberos interop. Sun provides strong support for the Web services standards included on our list and a strong range of technology adapters out of the box. Sun's weakness in standards and interop is that it too often stands alone in backing standards. Specifically on our list, the NetBeans IDE, JBI, and the Liberty security specs have very limited support from the other vendors. Sun also doesn't support Spring, a popular framework with enterprise Java developers.
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STRATEGY

Product strategy	Sun's planned product enhancements are strong, both for large-scale Web applications and service-oriented architecture (SOA) applications. Sun has some promising ideas for both large-scale Web applications and SOA applications but is not a visionary in either category. Sun's partner strategy has not yet generated big results for its application server platform; Sun's challenge is to add its Solaris partners to its middleware portfolio. Sun's product end-of-life policy is strong: a commitment to standard support for five years.
Corporate strategy	Forrester estimates that Sun Java ES and CAPS get about 15% of Sun's development resources. Many elements of Sun's corporate strategy are strong, the exceptions being its partner strategy, marketing/messaging, and some products and technologies. Sun will be able to execute in some situations requiring both large-scale Web applications and SOA applications. Sun is moderately well aligned with its primary and secondary markets.
Financial strength	Sun is a large company, and its financial health appears to be improving. Sun has the resources to fund its strategy. In its 2006 fiscal year, Sun generated a little more than \$13 billion in revenues from its hardware, storage, software, and services businesses, with a net loss of \$864 million but a healthy revenue-growth rate. Sun has been in transition for about five years after crashing when the Internet bubble burst. During the first half of its fiscal 2007, Sun's revenues of \$6.75 billion indicated year-over-year growth likely, and the company generated a profit of \$70 million. Cash flow from operations during fiscal 2006 was \$640 million and \$310 million during the first half of fiscal 2007.
Pricing and costs	Sun's pricing and likely costs are at the low end of the range represented by the vendors in this evaluation. The midsize configuration is priced out at \$50,000 per year for a standard support contract, including both Java ES and the CAPS suites. The large configuration is priced out at \$250,000 per year for standard support. Sun publishes its pricing model and its prices, and it treats servers that employ multicore processors the same as servers employing conventional processors. Sun's model has a built-in low end: All of its software is free to download. Sun also offers conventional licensing for its products and offers conventional support contracts for those products.

Source: Forrester Research, Inc.

Figure 1 Sun Microsystems Java Composite Application Platform Suite Evaluation Overview (Cont.)

MARKET PRESENCE

Installed base	Sun has a small installed base for its Java ES and CAPS products, at about 3,000 companies, but about 1,000 of these companies are new customers, which is a very healthy percentage. Sun did not report the percentage of its Java ES and CAPS customers on maintenance. Sun's developer program has 280,000 members, which is much fewer than its largest competitors.
Services	Sun has a large staff of implementation engineers and provides all forms of training.
Employees	Sun employs about 30,000 people worldwide, about 300 of whom are engineers working on Java ES and CAPS. Sun did not disclose the size of its sales force.
Distribution channels	Aside from its direct sales force, Sun relies primarily on its own Web channels to distribute Java ES and CAPS. Sun has a small number of resellers for those products and does not have a university program.

Source: Forrester Research, Inc.



Go online to download additional in-depth data and scores for this vendor and other vendors included in this Forrester Wave evaluation.

SUPPLEMENTAL MATERIAL

Online Resource

The underlying spreadsheet for Figure 1 is available online. The spreadsheet includes more detailed data and scores for this vendor.

This detailed data and scores for this vendor are also available online through an Excel-based vendor comparison tool that provides detailed product evaluations and customizable rankings.

The Forrester Wave Methodology

We conduct primary research to develop a list of vendors that meet our criteria to be evaluated in this market. From that initial pool of vendors, we then narrow our final list. We choose these vendors based on: 1) product fit; 2) customer success; and 3) Forrester client demand. We eliminate vendors that have limited customer references and products that don't fit the scope of our evaluation.

After examining past research, user need assessments, and vendor and expert interviews, we develop the initial evaluation criteria. To evaluate the vendors and their products against our set of criteria, we gather details of product qualifications through a combination of lab evaluations, questionnaires, demos, and/or discussions with client references. We send evaluations to the vendors for their review, and we adjust the evaluations to provide the most accurate view of vendor offerings and strategies.

We set default weightings to reflect our analysis of the needs of large user companies — and/or other scenarios as outlined in the Forrester Wave document — and then score the vendors based on a clearly defined scale. These default weightings are intended only as a starting point, and readers are encouraged to adapt the weightings to fit their individual needs through the Excel-based tool. The final scores generate the graphical depiction of the market based on current offering, strategy, and market presence. Forrester intends to update vendor evaluations regularly as product capabilities and vendor strategies evolve.

ENDNOTES

- ¹ Forrester evaluated the major application server platform suites and vendors across 175 criteria and found that Oracle received the highest scores across all of the scenarios we evaluated, due to its wide range of features and strong strategy. Microsoft and IBM, among the major players, were also Leaders, though not as strong as Oracle. Oracle rose above the other vendors in five separate customer requirement scenarios for the application server platform category. Our analysis produced two surprises. First, Pegasystems, a vendor focused on the business process management market, was a Strong Performer in two of the scenarios, approaching Big Blue in its scores. Second, Sun Microsystems revealed itself to be a Strong Performer, approaching the status of established player BEA Systems in that regard. Another of the business process management (BPM) and service-oriented architecture (SOA) vendors, Magic Software, was a Strong Performer in that category. JBoss, which has the most attractive pricing by far in this category, fell short of the leading vendors primarily because it has fewer features, as did SAP. See the July 11, 2007, “[The Forrester Wave™: Application Server Platforms, Q3 2007](#)” report.