

# Sun Java™ Center of Excellence Solution

Fundamentally improve the way your enterprise delivers software solutions based on Java technology.



## Service Highlights

- Achieve maximum flexibility and help enable rapid deployment of Ebusiness solutions through a service-oriented architecture that eliminates redundancies across applications
- Help reduce software development costs, improve time to market and enhance the quality of applications through proven methodologies, architectural best practices, and reusable components
- Build a team of internal experts by establishing a Center of Excellence for Java technologies
- Elevate the skills base of your entire development organization through roles and skills analysis, training, and mentoring
- Disseminate software development processes and project artifacts enterprise-wide through a knowledge repository
- Jump start your next generation software environment by leveraging Sun's intellectual property, including proven architectural best practices, methodology, patterns, and frameworks

## Responding Faster to an Ever-changing Business Environment

For most large businesses today, Java™ 2 Platform, Enterprise Edition (J2EE™) is the platform of choice for developing and deploying distributed enterprise applications. More large-scale, Web-based applications are built on the J2EE platform than on any other architecture. Users can reap the benefits of a highly-secure, open, robust and flexible platform. Is your organization realizing the full potential that J2EE technology offers to help you improve time to market, reduce costs, enhance quality of service, and increase return on investment?

Does your current architecture provide for the levels of security, availability, manageability, and scalability required in the network age? Is your software development organization faced with increasing pressure to pick up the pace in deploying new applications to connect with customers, suppliers, partners, and employees? Are your developers leveraging reusable software components rather than spending countless hours and dollars creating all of the code from scratch?

Many businesses are frustrated by application failures, missed deadlines, and budget overruns. Moving from standalone applications to object-oriented, component-based, multi-tiered, multi-threaded application development is challenging. It requires a commitment at the enterprise level to move beyond fire-fighting and implement a truly proactive solution. And, it requires a team of experts to help plan and institutionalize the changes.

## Building a Center of Excellence for Java Technology

That's where the Sun Java™ Center of Excellence (JCOE) solution comes in. Sun architects and knowledge consultants help your software development organization integrate Sun proven software development methodology and architectural best practices with your current software infrastructure, and enhance the skills and productivity of your IT staff.

The JCOE solution establishes a Center of Excellence for Java technology within your IT organization, initially staffed jointly by Sun experts and your own IT personnel. Providing

a service for all software development groups across your enterprise, the JCOE staff supports your software infrastructure and helps your developers improve their skills in designing, developing, testing and deploying J2EE technology-based solutions.

Sun's approach in the JCOE engagement is to empower your business to become self-reliant in Java and J2EE application development. A comprehensive offering tailored to your environment, the Sun JCOE solution can transform your software development organization into the agile operation it should be.

# Sun Java™ Center of Excellence Solution

## Service Topics

### Process and Technology

- Enterprise software architecture
- Software development methodology
- J2EE best practices
- Reusable software components
- Knowledge repository
- Operational environment
- Development tools selection

### Organizational Support

- JCOE organization
- IT roles and skills analysis
- Training programs
- Mentoring
- Success factors
- ROI metrics

## JCOE Solution Elements for

### Software Development Success

The Java Center of Excellence solution gives you access to the wealth of Sun resources, experiences, and expertise in Java technologies. Learn directly from the industry's Java experts on how to improve your people, processes and technology to maximize your software development investments.

### *Intellectual Property to Jump-start Project*

Drawing on extensive experience, Sun architects and methodologists created a premier architectural framework, software development methodology, J2EE best practices, and reusable software frameworks to speed the development of Java and J2EE technology-based environments. Sun gives you this valuable intellectual property with the JCOE service to jump-start your company on the road to success. Sun consultants leverage these processes and reusable software components to help you move quickly towards optimal performance.

### *Common Architectural Vision*

Just as an architect needs a blueprint for a new building, your enterprise needs a single, unified architectural vision. Using the Sun Master Architecture Plan (MAP) as a template, Sun architects help you create a roadmap that will support your current environment while addressing the unique challenges of a service-driven environment — providing services to end users over the network with predictable availability, reliability, performance, and security.

Your enterprise's IT architecture vision can leverage the key principles in the MAP:

- A service-driven architecture based on the Sun Java Enterprise System
- Reusable service definitions
- Software frameworks facilitating J2EE and Web services deployment
- An approved catalog of patterns leveraging Sun's patent-pending core J2EE patterns

### *SunTone™ Architecture Methodology*

An iterative, use case-driven design and development approach, the SunTone™ Architecture Methodology guides the software process from business requirements to production. Sun's proven methodology helps uncover and correct issues related to requirements, design, technology and usability early in the development cycle — before they cause problems that can impact time to market or your budget.

Sun software methodologists will work closely with your team to integrate the SunTone Architecture Methodology with your existing software development methodologies, to create the ideal structure for your development environment.

### *Reusable Software Components*

Reuse is one of the best ways to reduce time to market and overall development costs. Enterprises that want to make it easier and faster to develop and deploy new applications are turning to distributed, component-oriented architectures using common services and reusable assets.

Through reuse, some major corporations are enjoying, on average, 40 percent faster development cycles. Instead of starting from scratch to meet every new business need, savvy businesses are assembling services from existing components and gaining:

- Increased developer productivity
- More predictable, higher-quality results
- Reduced time to market
- Lower risk and maintenance costs

The Sun team will work with your staff to customize a reuse workflow for your enterprise and integrate Sun J2EE patterns and software frameworks.

#### *Knowledge Repository*

Once you've amassed a collection of reusable components, you'll need a place to store and manage them. Sun consultants will help you build a repository—and a portal—for these components as well as for software practices and other relevant developer documentation.

#### *Skills Development*

Your knowledge repository could be filled to the brim, but you also need to have the right skill sets in place to make use of it. Sun will provide knowledge experts who can help you identify the roles and skills needed in order to be successful in creating Java and J2EE applications.

Sun knowledge consultants can clarify and document your IT organizational development needs, providing:

- Role identification and definition
- Detailed job descriptions
- Detailed skill profiles for each role
- Role-based learning paths

With these insights, you can identify the appropriate candidates for each role, assess their skill readiness and build targeted skill development plans to help them progress to the desired level of expertise. Sun consultants can provide a comprehensive, customized training program as well as one-on-one mentoring.

#### *Center of Excellence Organization*

During the JCOE engagement, Sun architects and knowledge consultants assess your IT organization to determine the best approach to integrate a Java Center of Excellence program management office. Sun consultants can help you define the job roles, write job descriptions, and create skill profiles—plus identify which of your IT members are suitable for each role. Once the team is chosen, Sun consultants work side-by-side with team members to develop your enterprise architecture and methodology, and to transfer knowledge to your team to ensure lasting success.

On an ongoing basis, the JCOE team serves as the focal point within your IT organization to ensure that consistent architecture, software development methodology, and J2EE best practices are observed enterprise-wide. JCOE members can provide the leadership to foster reuse, support Java coding standards, and build in quality at the architecture level. And, most importantly, the team can transfer J2EE development skills and best practices to your software development teams to ensure that future projects progress as efficiently and smoothly as possible.

#### *Application Development Support*

Software development activities must continue while the JCOE team optimizes your IT organization. Sun consultants can provide immediate Java and J2EE application development support to ensure that your urgent application development problems are addressed—while simultaneously taking a proactive approach by building a JCOE structure that will mitigate future development problems.

#### **The Sun Approach**

The Sun Java Center of Excellence solution provides a comprehensive, proactive approach to enable the rapid deployment of quality business applications throughout your enterprise.

Rather than bringing in masses of people to take over your software development organization, the Sun approach is about sharing knowledge and experience so your company can become self-sufficient. A small team of highly skilled Sun architects, a methodologist, knowledge consultants, and a project leader provide the expertise to help transform your organization. In the end, your internal Java Center of Excellence staff is empowered to continue to build on the foundation created by the Sun team.

Sun also gives you invaluable intellectual property—a Master Architecture Plan, the SunTone Architecture Methodology, J2EE best practices, and software frameworks—to jump-start the project and serve as a baseline for building a development structure that will serve your current and future needs.

To realize all the benefits from a JCOE solution, Sun recommends a phased approach as follows:

- *Inception*: assess your current IT processes, architecture, organizational structure, skill development needs, and metrics for success.
- *Planning*: based on the assessments completed during the inception phase, develop plans for improvements.
- *Execution*: implement the plans defined in the prior phase and mentor your staff to success.
- *Transition*: transfer JCOE responsibilities to your staff and continue to provide mentoring and conduct periodic reviews as needed.

## Java Center of Excellence Solution

### Key Activities

- Inception**
  - Assess current software architecture, methodology, operational environment, and tool sets
  - Determine the best way to integrate the Center of Excellence into your IT organization
  - Assess IT organization jobs, roles and skills
  - Define success factors and ROI metrics
- Planning**
  - Develop technology, process, and IT talent management plans to resolve gaps between current and desired states
- Execution**
  - Implement the software methodology and best practices plans
  - Recommend software development tools and help install them
  - Define reuse workflow and establish a reusable asset base
  - Help construct new software reusable frameworks and business services
  - Build a repository for documents and reusable software components
  - Mentor software development project team using new methodology and best practices
- Transition**
  - Incrementally reduce Sun's involvement in your Center of Excellence
  - Conduct periodic reviews of architecture, methodology, and your staff's skills proficiency

### Teaming with Experts

As the creator of Java technology, Sun offers an unsurpassed breadth of skills and experience in service-oriented architecture and J2EE best practices. We have decades of experience leveraging this innovation and expertise to help customers build optimized network computing solutions and translate that innovation into business advantage. This positions the Sun architects, methodologists and knowledge consultants as the experts to work with you to enhance your software application development processes and skills.

Sun combines the best people, processes, and technologies to deliver comprehensive solutions tailored to meet your needs. Sun

consultants have the expertise and experience to help large enterprises like yours take advantage of the latest advances in software development technologies, processes, and best practices. Best of all, you can build a software development organization that can impact the bottom line by delivering quality business applications on time and on budget.

Sun has made substantial, long-term investments in Java technologies and Web services. When you want something done right, you go to the expert in the field. For Java technologies and architecture, it only makes sense to come to Sun Microsystems, the inventor and recognized leader in J2EE and other Java technologies.

### Taking the Next Step

For more information on the Sun Java Center of Excellence solution and other offerings from Sun Services, contact your local Sun Microsystems sales representative, or visit our Web site at [www.sun.com/service/solutions/java/](http://www.sun.com/service/solutions/java/)

### ADVERTISEMENT

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