Java: The Best Environment for Network-Based Applications

As one of the most popular applications environments in the world, Java is used by companies in all major industries. Whether deployed on cell phones, embedded devices, game consoles, laptops, or in datacenters, Java offers the rich user interface, performance, versatility, portability, and security that today’s networked applications require.

Java is everywhere—and for good reason. As the foundation for virtually every type of networked application, Java is the global standard for developing and delivering mobile applications, games, Web-based content, and enterprise software. For nearly 20 years, Java has helped businesses provide end users with leading-edge functionality in consumer gaming, Web, and enterprise applications. Java:

• Provides you with end-to-end capabilities. Because Java is platform-independent and uses the same technology on the client and on the server, businesses can leverage in-house resources to develop exciting applications faster and with less risk.
• Offers unmatched security. Java ensures that applications can securely access key system resources while protecting critical data from theft, loss, and corruption.
• Delivers the richest user experience. End users benefit from rich interactive interfaces like video, animation, and rich text across desktop, Web, and mobile applications alike.

Oracle and Java
Java is one of the computer industry’s best-known brands and most widely deployed technologies. With the acquisition of Sun, Oracle will drive continued innovation and investment in Java technology for the benefit of customers and the Java community. Oracle has been a leading supporter of Java since its emergence in 1995, and takes on the new role as steward of Java technology with a relentless commitment to fostering a community of participation and transparency:

• Java Platform, Standard Edition (Java SE) continues with strengthened investment as the core of the platform.
• Java Platform, Enterprise Edition (Java EE), with Oracle GlassFish Server as the reference implementation, continues with strengthened investment as the platform for enterprise development.
• Java Platform, Micro Edition (Java ME); Java TV technology; Java Card platform; and JavaFX continue with strengthened investment as the
ever-expanding and ever-innovative fulfillment of Java’s promise: Write once, run anywhere.

Why Businesses Are Choosing Java
Java is particularly attractive for enterprise deployment. Whether using Java to develop a conference scheduling tool, an e-mail application for mobile phones, or a cross-device client for consumer Web services, Java is increasingly the environment of choice for both internal and external application development.

- Java delivers what end users want. Your end users—whether internal or external—have become accustomed to lively and engaging cinematic experiences associated with today’s Websites. They increasingly expect this rich interface in business applications, device interfaces, and more. Java makes this possible.
- Java expertise and resources are readily available in the market. Because Java is the world’s most popular development environment, it is much easier to find talent and other resources to complete projects efficiently and cost-effectively.
- Java can be deployed for consumer as well as enterprise applications. Whether developing a commercial consumer application or a mission-critical enterprise one, you can depend on a single programming environment to do everything you need to satisfy your end users and customers.

The End-to-End Capabilities of Java
Whether developing applications for mobile devices, desktops, or servers, Java applications are portable across even the most disparate computing environments.

Implementing Java for Infrastructure
Java offers a single, unified programming model that can connect all elements of a business infrastructure. Java EE is for businesses that want to build a robust Java infrastructure. As evidenced by 10 million annual downloads of Oracle GlassFish Server across virtually all application types—from business process management and enterprise resource planning (ERP) to supply chain management, sales and service force automation, and office productivity—businesses around the world have come to depend on Java EE for developing internal as well as external applications.

Implementing Java on the Desktop
Java SE lets you develop and deploy Java applications on users’ desktops—whether via the internet or directly onto desktop devices. Desktop Java technologies can be used to create rich client applications and applets that are fast, secure, and portable. Preinstalled on more than 97 percent of all enterprise desktop systems, Java SE is designed specifically to develop secure, portable, high-performance applications for the widest range of desktop computing platforms possible, including Apple Macintosh, Oracle Linux, Microsoft Windows, and Oracle Solaris. By making applications available across desktops in heterogeneous environments, businesses can boost end user productivity, communication, and collaboration—and dramatically reduce the cost of ownership of both enterprise and consumer applications.

Implementing Java on Mobile Devices
Java ME provides a robust, flexible environment for applications running on mobile and other embedded devices: mobile phones, personal digital assistants (PDAs), TV set-top boxes, and printers. Java ME includes flexible user interfaces, robust security, built-in network protocols, and support for networked and offline applications that can be downloaded dynamically. Applications based on Java ME are portable across many devices, yet leverage each device’s native capabilities.

Oracle Is the Java Leader
Since completing the first instance of Java in 1991, Sun worked tirelessly to make it the global standard for Web-based and distributed computing. With its acquisition of Sun in 2009, Oracle has taken up the Java banner and plans to continue innovating and investing in it to help ensure your future success.