

Java™ Platform, Enterprise Edition 5 - At-A-Glance

Java™ EE 5 Overview

The Java Platform, Enterprise Edition 5 continues the history of innovation in the Java platform for developing portable, robust, scalable, multi-tiered server-side enterprise applications. Java EE 5, finalized in May of 2006, is the most significant update to the Enterprise Java platform in years and represents a major revamp to the developer programming model radically simplifying Java EE development, especially for Web Services, the Web Tier and transactional components. The platform continues to evolve to support the latest technologies for building Web 2.0 applications and Service Oriented Architectures (SOA).

What's New in Java™ EE 5?

1. The focus of Java EE 5 is Ease of Development. The platform includes several new or updated APIs which make Enterprise Java development easier:

- Enterprise Java Beans (EJB) 3.0 greatly simplifies the programming model by supporting Plain Old Java Objects (POJOs), which can easily be converted to Web Services with Annotations or made persistent using the Java Persistence API.
- The Java Persistence API is a much cleaner approach to mapping Java objects to relational databases, and benefits greatly from work done in Hibernate, TopLink, and Java Data Objects (JDO).
- JavaServer Faces (JSF) 1.2 facilitates building Web 2.0 applications with AJAX and reduces the complexity of constructing user interfaces for Web-based applications, by providing pre-packaged components that developers can call on from applications, significantly reducing new code development.
- Updated Web Services now include JAX-WS 2.0 and JAXB 2.0 which support the latest W3C and WS-I standards (e.g. SOAP 1.2, WSDL 1.1), protocol and transport independence, and the REST style of web services.
- Support for Annotations eliminates the need for deployment descriptors in most cases and make it easier to deal with persistence, web services, transactions, security and all the other powerful capabilities of Java EE.

Top Ten Things You Should Know About Java™ EE 5

1. Ease of development	In addition to the new technologies listed above, Java EE 5 accelerates Enterprise Java development by removing boilerplate code, relying upon reasonable defaults whenever possible, and providing a broader set of commonly used utility classes. Java EE 5 takes the drudgery out of creating applications and reduces the amount of time spent worrying about Enterprise Java plumbing and thus allows developers to concentrate on business logic.
2. Increased productivity	The enhancements in Java EE 5 greatly reduce the amount of code and configuration with which developers have to contend, improving their productivity. The gains are significant: sample applications converted to use Java EE 5 used 60% fewer Java classes, 80% fewer XML files, and 30% less Java code. (Source: Sun)

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3. Community	The Java EE 5 specification was developed under the auspices of the Java Community Process (JCP) v. 2.6 with input from more than 30 community experts. The Java EE 5 SDK is based on the application server being developed under Project GlassFish, demonstrating that a collaborative open source community can deliver robust, enterprise class code.
4. Compatibility	Licensees need to pass the Compatibility Test Suite (CTS) to use the Java Compatible, Enterprise Edition brand which ensures that applications which pass the Application Verification Kit (AVK) are portable across compatible application servers. Backward compatibility of Java EE 5 with previous versions of the Java Enterprise platform preserves the skill-sets of current Java Enterprise developers and protects investments in enterprise application codebases.
5. JBI	The Java Business Integration (JBI) specification (JSR 208) provides the Java platform with a standard way to implement component-based services and enterprise integration frameworks based on web-services protocols and open standards. Using Java EE 5 to define core web services, business logic, and legacy services connections, the two technologies provide a powerful combination for building complex SOA applications.
6. Tool support	NetBeans Enterprise Pack 5.5 Software Preview gives developers early access to tools that enable Java EE 5 Platform development and creation of SOA applications, including Unified Modeling Language (UML) tools, visual design tools for SOA architects, and the Java EE 5 SDK.
7. Vibrant Java Enterprise ecosystem	Consists of over 30 licensees and 28 J2EE-compatible products and includes all of the major application server vendors, Sun, Oracle, IBM, and BEA, as well as Apache, Borland, Fujitsu, Hitachi, IONA, JBoss, Kingdee, NEC, ObjectWeb, SAP, Sybase, Tmx Soft, Tongtech, and Trifork.
8. Most downloaded version	There have been over 4.5 million downloads of the previous version of the Java Platform, Enterprise Edition, J2EE 1.4. (Source: Sun)
9. Market size	According to industry analysts, Java EE application servers were a \$2.2 Billion market in 2004.
10. Most U.S. enterprises are using Java Enterprise Edition	75% of U.S. enterprises are using Java Enterprise Edition in production, development, or in pilot projects. (Source: BZ Research)