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Java and .NET

Java and .NET both bring something to the party

.NET Framework Download Java Update Networking Projects: The **.NET** and **Java platforms** both provide support for **enterprise deployment** of **distributed business systems**, yet significant **differences** between the two **platforms** are worth examining.

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Each of the dominant Managed Runtime Environments has distinct advantages and a bright future; Intel is working with ISVs to provide next-generation support for both.

The .NET and Java platforms both provide support for enterprise deployment of distributed business systems, yet significant differences between the two platforms are worth examining.

The Java platform is based on industry-defined standards. It consists of a programming language, a voluminous set of APIs and tools, and a runtime environment, the Java Virtual Machine (JVM).

The JVM executes a [Managed Runtime Environment \(MRTE\)](#) and supports key features of the MRTE: memory management, exception handling, thread scheduling, and security. The JVM is portable to numerous operating systems and hardware platforms, but it supports only the Java programming language.

The .NET Platform consists of the .NET Framework class library, the Common Language Specification (CLS), the VisualStudio .NET IDE, .NET programming languages, and a managed runtime environment: the Common Language Runtime (CLR).

The CLR supports multiple programming languages, each of which provides its own front-end compiler to generate intermediate language (IL) code, which is organized into assemblies. More than 20 programming languages are supported by .NET, including C, C++, VB.NET, J#, and the C# programming language, which was specifically developed for the .NET platform. New languages are added to the .NET roster constantly.

C# is the programming language of choice for the .NET platform. It boosts programmer productivity by introducing a set of programming primitives to automate common programming

tasks (events, delegates, properties, attributes, iterators, and overload operators). .NET also provides easy integration with unmanaged Win API code and COM+ components and services.

Java and .NET support enterprise deployment of distributed Systems

J2EE is the version of the Java platform specifically for enterprise computing. A number of features enable development of large-scale, high-availability applications, including support for distributed transactions, role-based security, object pooling, data-connection management, and automated SQL Server data manipulation.

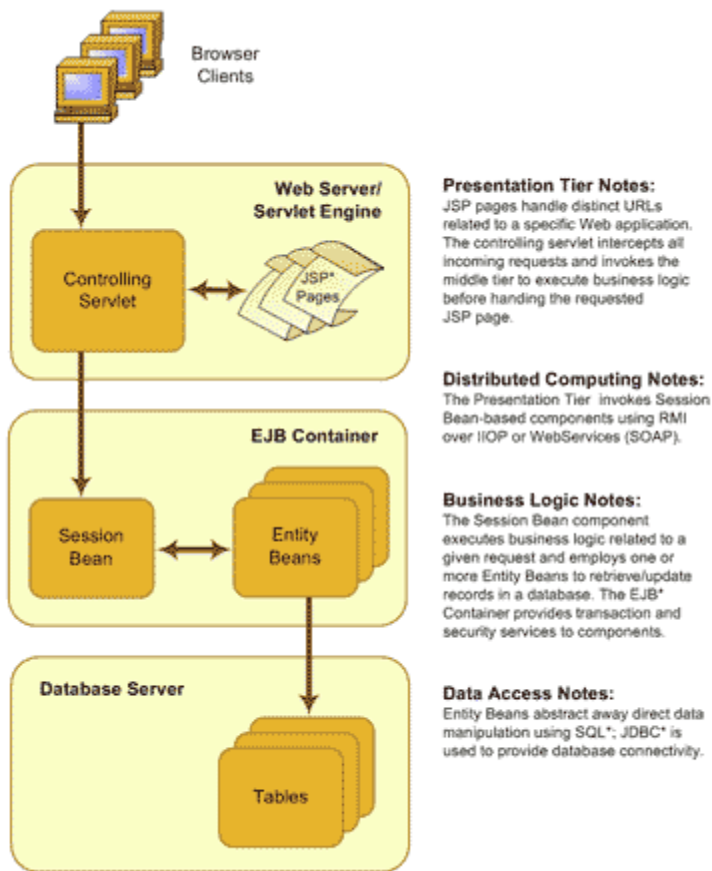


Figure 1: The J2EE e-commerce application stack

Microsoft .NET has no separate platform edition for enterprise-class computing. Instead, it relies on the COM+ infrastructure (called the Enterprise Services package in .NET) to carry out some of the same functions as the J2EE container.