J-Integra for .NET

J-Integra for .NET is the most effective and widely supported middleware technology enabling interoperability between Java and Microsoft .NET components. J-Integra for .NET is part of a comprehensive suite of Enterprise Interoperability Solutions from Intrinsyc which also include J-Integra for COM and J-Integra for Exchange. These solutions are used by Fortune 1000 companies to effectively integrate and harness the most powerful features of Java and Microsoft technologies.

Seamless Integration Between Java and Microsoft .NET

Java and Microsoft .NET are at the forefront of enterprise development. Almost every medium-to-large business is certain to have systems that use these technologies. Intrinsyc’s J-Integra for .NET is an application integration technology that bridges Java and Microsoft systems so they can work together in concert.

Using J-Integra for .NET, you can access .NET from Java, and vice versa, enabling you to take advantage of the power of both technologies. Now you can mix and match your Microsoft .NET technologies, such as ASP.NET and .NET components, with Java technologies, such as Enterprise JavaBeans and Java Servlets.

J-Integra for .NET saves development time and allows you to leverage the existing skills of your developers by reusing your Java and .NET components throughout your systems. J-Integra for .NET now features new plug-ins that automate configuration tasks and proxy generation within the Visual Studio .NET and Eclipse Integrated Development Environments.

Applications

Some uses of J-Integra for .NET include:

- Use any language supported by .NET to write clients for Enterprise JavaBeans (EJBs)
- Access .NET components from any Java Object/EJB
- Integrate ASP.NET with EJBs
- Connect Java Servlets together with .NET components
- Access an Internet Information Server (IIS) component from Java
- New plug-ins for Eclipse and Visual Studio .NET IDEs

Use .NET Remoting with Java

J-Integra for .NET uses a pure Java implementation of .NET Remoting, Microsoft's distributed object protocol for .NET frameworks. .NET Remoting is designed to be used in tightly-coupled Intranet environments where COM, CORBA, or RMI was previously used. It can also be used in loosely-coupled Internet environments.
Integrate Java and .NET Seamlessly with Intrinsyc's J-Integra for .NET

Use .NET Remoting with Java cont’d

.NET Remoting is used to enable Common Language Runtime (CLR) components in different application domains to talk to each other. It is important to remember that CLR supports many different languages including C#, Visual Basic .NET, ASP.NET and C++. Using J-Integra for .NET, Java components appear to be CLR components, and CLR components appear to be Java components.

One of the most interesting features of .NET Remoting is that the transport protocol and the data formatting are configurable and extendable. Currently .NET and J-Integra for .NET support both HTTP and TCP/IP transport protocols, and either SOAP or binary data formatting.

Future Compatibility with J-Integra for .NET

Applications which use J-Integra for .NET will continue to run under Indigo, Microsoft’s new web services communications technology. Microsoft has stated clearly that .NET Remoting as we currently know it is not going to be removed from the .NET frameworks when Indigo ships. Intrinsyc Software is a member of Microsoft’s Indigo Ascend Program, and is already developing a high performance, bi-directional Java/Indigo interoperability channel which will be available with the official release of Indigo.

In addition, Intrinsyc Software will be introducing a new "fast binary channel" to J-Integra for .NET in the summer of 2005. This new "fast channel" will include the following features:

- Faster than pure .NET Remoting, especially in the serialization and de-serialization of objects
- 100% managed code solution
- Make any .NET object remoteable, not just objects derived from MarshallByRefObject
- Bi-directional

J-Integra for .NET Features

- Pure Java implementation
- Bi-directional: .NET to Java, Java to .NET
- Supports .NET 1.x and 2.x under Windows 2000/NT/XP
- Compatible with JDK 1.3 and higher
- Supports BEA Weblogic, IBM WebSphere, Oracle9i, iPlanet, Borland Enterprise Server and JBoss
- Supports Visual Studio .NET and Eclipse development tools
- Support for HTTP or TCP/IP transport protocols
- Support for binary message formats
- Maintenance of class hierarchy between Java and CLR classes
- Client-activated and server-activated objects
- Marshalling objects by reference or by value
- Parameterized constructors for client-activated objects
- Invocation of methods on CLR objects from Java
- Invocation of methods on Java objects from CLR
- Java/CLR primitive types as parameters/return values
- Passing Java/CLR objects by reference and by value as parameters/return values
- Multidimensional arrays as parameters/return values
- Propagation of exceptions between Java and .NET and vice-versa
- Callbacks
- Accessing EJ Bs as CLR components
- Generation of Web Application archives for easy deployment
- Logging
- Basic Digest HTTP authentication

Availability

Download a free evaluation at j-integra.intrinsyc.com/downloads/