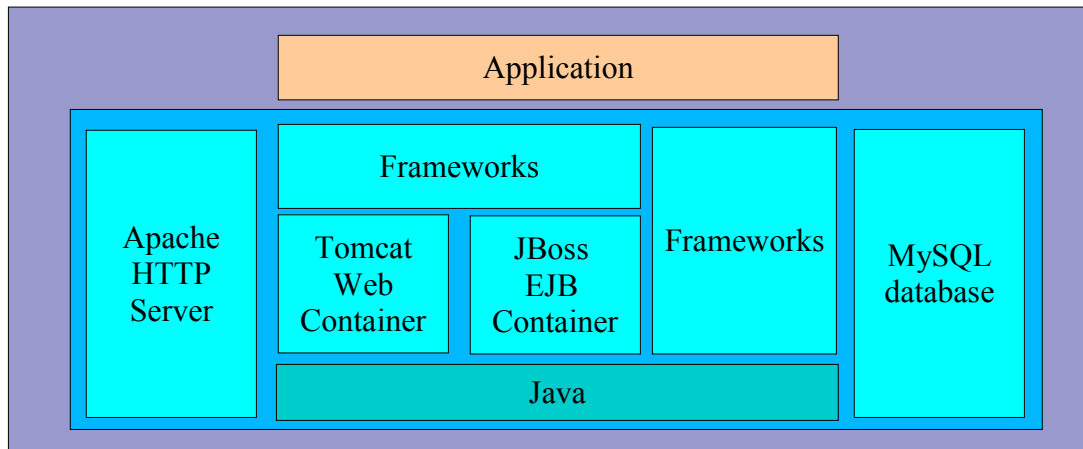


## What is OpenEnterpriseX?

OpenEnterpriseX is a free, open source, comprehensive and standards-based Java(TM)/J2EE(TM) development suite distribution for building enterprise application. It is based on leading open source web servers, containers, frameworks, utilities, databases and integrated development editors.



High Level Overview of the OpenEnterpriseX distribution.  
(Except for Java and Application, the rest of the packages are all part of the OpenEnterpriseX distribution.)

## Why OpenEnterpriseX?

In an environment of budget pressures and accelerating timelines, IT departments will need to deploy software applications that deliver new services, operational efficiencies, and competitive responses, faster but with less resources.

In the past few years, Java(TM) and Java 2 Platform, Enterprise Edition(TM) has firmly been established as the mainstream development platform for enterprise applications. Java(TM) is an elegant, powerful and simple to use programming language. While the J2EE platform greatly simplifies the development of enterprise applications, it also delivers highly scalable solutions at the same time. Java(TM) and J2EE(TM) definitely lead to faster deployment of scalable softwares.

Many branded industry vendors have come up with Java(TM)/J2EE(TM) solutions. These solutions are often powerful and flexible, but are also costly.

On the other hand, the open source community sprouted as a response to proprietary software owned by corporations. These community based groups of volunteers have created many great softwares. One most notably, the Linux operating system. Enterprise adoption of Linux has been increasing for the last few years. It has garnered a lot of attention and many corporations have already been using Linux for deployment of server applications.

Another is the Apache HTTP Server. The Netcraft Web Server Survey(Oct 2003) found that more than 64% of the web sites on the internet are using Apache, thus making it more widely used than all other we servers combined. With this kind of success the Apache Group (the open source community for the Apache HTTP Server) has gone further to produced even more software packages for use by the industry.

Other open source communities have also grown at a tremendous rate to provide the industry with great software packages. These software packages include but are not limited to IDE (integrated development editor), frameworks, utilities and J2EE(TM) application containers. Many of these open source communities have in fact been leading the innovation of technology. An example is the various technological advances made by the JBoss container. This has brought great benefits to the IT industry.

So the question is, “is it possible to combine the above two to deliver scalable software faster but with less (both monetarily and in terms of time)”. The answer is definitely a "YES!".

In fact, if you take a close look at most J2EE projects today, they in a way or two might already have made use of some open source packages. These packages may be Struts, (<http://www.apache.org>) the Model View Controller Framework for Web Application, or the JUnit framework for conducting Unit Testing, or the Axis framework for creating Web Services in Java(TM).

However, it is important to note that projects that are carried out completely based on open source softwares in the industry are not as many as compared to those that used a mixture of commercial and open source technologies.

There are many reasons for this. One of them is the perceived lack of support, documentation and training for open source software packages. This situation is definitely improving as many companies are starting to provide commercial support, documentation and training. Apart from independent consultants, major vendors like Sun and Hewlett-Packett have also begun to offer support and integration services for Linux.

Another reason is the significant number of open source licenses to deal few. To name a few, an open source license may be GNU General Public License(<http://www.gnu.org>), the Apache Software Licenses(<http://www.apache.org>), or the Common Public License (<http://www.cpl.org>). However, the setup of the Open Source Initiative (<http://www.opensource.org>) to bring about standardization of the definition for open source has definitely brought benefits in terms of reducing the confusion.

Yet another reason is the lack of an uniform approach to the needs of a Java(TM)/J2EE (TM) developer. The open source packages are typically developed by different individuals and entities, each with its own setup, installation procedures and documentation. The different software packages are definitely high quality and does definitely work with each other. However, in order to make use of these excellent tools and applications, developers - especially those who have not used some of these open source packages before - often need to spend substantial time to setup and configure the different softwares to make them work together. This in a way makes the evaluation of open source softwares difficult and limits their use.

To address this problem, we (at [openenterprise.org](http://openenterprise.org)) believe that a single uniform distribution of the different open source packages is required. We provide a distribution that will address the problem of setting up and configuring the different softwares in a manner that help developers quickly make use of them. This will also be extremely helpful to developers who are evaluating certain open source software packages.

Upon installation of the distribution, potential developers should be able to start the evaluation immediately and determine the usefulness of the software packages instead of spending considerable amount of time configuring and setting up softwares to work with each other. The skills of setting up and configuring is important, however it should come at a later stage when developers are more well versed with the technology the software packages have to offer.

OpenEnterpriseX is a distribution built to address the above problems. OpenEnterpriseX packs the leading open source packages and integrated them into a single uniform solution. A sample of the software packages includes the Tomcat Web Container, JBoss EJB Container, Apache Web Server , MySQL database, Struts framework, JUnit framework, Eclipse SDK etc...

An installer is also provided to install these different open source packages for Java/J2EE. The installation, setup and configuration of the software packages is taken care of automatically by the distribution.

To illustrate the benefits of the distribution, developers will be able to launch a Petstore (xpetstore, <http://xpetstore.sourceforge.org>) application upon installation of OpenEnterpriseX without further configuration to any of the packages. After exploring the features and capabilities of xpetstore, they can proceed to launch Eclipse(TM) to view and build the source code.

**In one sentence, the goal is to provide greater ease of use for the different open source software packages.**

Documentation for the open source packages are treated as a single uniform software instead of separate documentations for individual softwares. The synergy for using the packages together are emphasised.

It is important to note the packages included in the distribution has been carefully chosen to be of excellent quality with wide industry support. This is to ensure that developers do not use packages that may stop improving. We also believe at the rate of which softwares are changing, there will be a time when certain packages might need to be replaced. This is the time the community will come into the picture of providing advises on the migration of the older packages to the newer one. Companies or developers that make use of the distribution will not get left behind or abandoned.

We believe with that the integrated approach of OpenEnterpriseX bundling will bring greater understanding and utilization of the open source packages and ultimately reduce the barrier for adopting open source technology. The tested and proven configurations in OpenEnterpriseX will also help you accelerate the full development cycle of your projects and bring softwares to market in a shorter time with greater return of investment.

## **What software packages are included in OpenEnterpriseX?**

The following are the Open Source packages included:

### **Apache HTTP Server**

Robust, commercial-grade reference, efficient, extensible implementation of the HTTP protocol. The most popular HTTP server.

### **JBoss(TM)/with Tomcat**

J2EE application server with highly flexible service oriented architecture and microkernel approach based on Java Management eXtensions (JMX). Tomcat is the official Reference Implementation of the Servlet and JavaServer Pages technologies.

### **Eclipse(TM) 3.0 M8**

Open source software development project dedicated to providing a robust, full-featured, commercial-quality, industry platform for the development of highly integrated tools.

### **Struts**

Framework for structuring the web application into Model-View-Controller(MVC) model. Loose coupling between the View and Model can make applications significantly easier to create and maintain.

### **Axis**

A SOAP engine/framework for constructing SOAP processors such as clients, servers, gateways.

### **Commons Logging**

Wrapper around a variety of logging API implementations.

### **JMeter**

Java desktop application designed to load test functional behavior and measure performance. It has the ability to record web requests from the browser and replay the entire sequences while simulating multiple users.

### **Tomcat Connectors**

Tomcat-Apache plug-in that handles the communication between Tomcat and Apache.

## **MySQL(TM)**

Popular open source database with the capabilities to handle most corporate database application requirements with an architecture that is extremely fast and easy to use.

## **MySQL(TM) Java Connector**

Type IV Java driver that converts JDBC (Java Database Connectivity) calls into the network protocol used by the MySQL database.

## **Velocity**

General purpose Java-based template engine. Velocity separates Java code from the web pages via the Model-View-Controller(MVC) model, making the web site more maintainable over the long run.

## **Ant**

Java-based build tool similar to Make. It is used for building software across multiple platforms

## **Log4j**

Enable/Disable logging at runtime without modifying the application binary. The log4j package is designed so that logging statements can remain in shipped code without incurring a heavy performance cost. Logging behavior can be controlled by editing a configuration file, without touching the application binary.

## **Be Involved in the Revolution!**

Download it now at <http://www.openenterprisex.org>  
Contact [charles@openenterprisex.org](mailto:charles@openenterprisex.org)

### **Legal Note:**

Java, Java 2 Enterprise Edition and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc in the United States or other countries, or both.

The Eclipse Project, Eclipse Platform and Eclipse Workbench is an offering from the Eclipse Project Open Source Community which is under copyright of IBM and others.

JBoss is a registered trademark and servicemark of JBoss Inc.

MySQL is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Apache is a trademark of the Apache Software Foundation.

All other logos, terms or trademarks are trademarks or registered trademarks of their respective owners.