

## The Mission

LiveWater, Inc was founded in 1999 to deliver Java-based tools, technologies and eCommerce application components that fully leverage the Java 2, Enterprise Edition (J2EE) platform and simplify the development and reuse of standards-based Java eBusiness solutions. By enabling professional development teams to adopt a component-centric model for development, LiveWater helps them to achieve the long-sought after benefits of:

- Faster time to broader markets
- Higher quality
- Consistent deployment of business rules and practices

**LiveWater  
Leverages  
J2EE**

## The Need for Components

Creating successful eCommerce systems requires a thorough strategy for building adaptive applications, and that success is based on quality software applications. Developers need a component-centric development solution that addresses their key needs:

- The ability to design applications from new and previously built and tested components
- The ability to adapt, customize, and reuse those existing components - whether built internally, delivered by LiveWater or obtained from external suppliers
- The ability to modify commercial components - without voiding warranties or nullifying upgrade paths of those suppliers
- The ability for multi-disciplined professionals to collaborate on a unified team

**eCommerce**  
=  
**Components**

## The Need for Java and J2EE Solutions

### Java:

- is a component-based technology platform forms the foundation of an adaptive application strategy.
- enables developers to take full advantage of the Internet's three-tier computing model.
- applications offer organizations flexibility, durability and scalability to fully exploit the Internet economy.
- is the strategic platform of choice for enterprise-class systems required to deliver reliability and integration.
- is the appropriate choice for organizations desiring to attract the best technical talent vendors.
- provides a component-based development platform that is the key to eBusiness developer productivity and true component reusability.
- provides organizations the ability to select best-of-breed functionality and to deliver higher quality solutions with better time to market and superior adaptive capabilities.

**Java is much more than a  
programming language**

## The Target Market: The Java Component Supply Chain

LiveWater targets the professional software development teams (ISVs, integrators and corporate developers) who create, evolve, maintain and deliver eCommerce and eBusiness software solutions. LiveWater believes that multiple factors are converging to make this market compelling:

- eBusiness applications contain greater complexity but must be developed in shorter timeframes
- These applications have greater visibility - they are used by customers and partners, not just employees, and therefore carry a higher cost of failure
- The J2EE platform has emerged as the ideal platform for deploying scalable and reliable eBusiness solutions
- There is a blossoming community of commercial component suppliers who provide a rich resource for developers seeking fast, proven solutions to plug into their applications

**LiveWater  
understands the  
Java Component  
Supply Chain**

## The Technology Objectives

- LiveWater was founded with an explicit mission to enable organizations to build an efficient Java Component Supply Chain through the delivery of J2EE component development tools and management utilities.
- The goal for LiveWater's solutions is to allow organizations to exploit their existing investment in tools, servers and components.
- LiveWater accomplishes this by delivering a Java tool set that simplifies component development and reuse, thereby improving productivity and innovation, for both the Java expert and Java amateur alike.
- The LiveWater Component Design Center is designed to streamline the development process along the Java Component Supply Chain by taking advantage of the various skill sets in the multi-disciplinary eCommerce development team. This enables collaboration across those skill sets, and by delivering simplified component development capabilities for successful component extension, customization, adaptation, reuse and management.

**LiveWater  
optimizes the Java  
Component Supply  
Chain**

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**LiveWater**  
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## The Technology Objectives (con't)

For the past two years, LiveWater principals have been constructing a foundation of technologies and expertise that will carry the company and the product solutions forward. It is predicated on the following technology objectives:

- Fully exploit the latest generation of the J2EE platform
- Deliver unique and sophisticated tools for the design, development, and deployment of Java-based applications that satisfy the advanced Java component developer as well as the application professional who is a functional expert and familiar with 4GL-style tools
- Enable the reuse of newly developed and existing components within applications, while retaining the ability to receive updates and enhancements from the provider
- Provide robust eCommerce and eBusiness components that can be easily adapted to specific application requirements; deliver designable definitions for market leading components enabling them to be adapted, extended, and combined with other components to build or enhance eCommerce solutions
- Deliver full services that empower development teams to get up and running immediately with the LiveWater portfolio of tools, utilities and solutions
- Deliver practical and usable component management tools that enable the development team to track component use, determine impact of changes, and successfully maintain, package, and deploy component-based applications

## LiveWater J2EE Solutions

LiveWater is committed to simplifying component-based development and component reusability on the Java 2 Enterprise Edition platform. LiveWater adds value to the J2EE deployment platform by enabling the creation of truly adaptive eCommerce applications through four key deliverables:

1. The LiveWater Component Design Center
2. Robust portfolio of reusable and adaptable LiveWater J2EE eCommerce Frameworks
3. LiveWater Component Definitions for adapting and customizing market-leading eCommerce and Java application components to your applications requirements
4. LiveWater Services

**LiveWater: the Electronic  
Bricks and Mortar for  
eCommerce Application  
Development and  
Deployment**

## 1. The LiveWater Component Design Center

The LiveWater Component Design Center is an integrated environment for managing the entire life cycle of strategic eBusiness component-based applications on the J2EE platform. LiveWater:

- Supports the creation of dynamic, web-based applications through server-side Java/HTML capabilities (Java Server Pages, Servlets).
- Delivers capabilities to create rich graphical applications with full support for the AWT/Swing tool set and JavaBeans.
- Implements full support for distributed, component-based applications with full Enterprise JavaBean support (Session and Entity) and comprehensive application server support and packaging/deployment capabilities.
- Enhances team development through robust component tracking, inheritance and change management facilities.

### 1. The Tools

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## 1. The LiveWater Component Design Center (con't)

Our development tool solution, the LiveWater Component Design Center, is a 100% pure Java tool that enables eCommerce and eBusiness application builders, as well as Java application developers to:

- Rapidly build new application components
- Reuse and extend existing components
- Customize components for specific application requirements and still maintain them
- Assemble and deploy component based applications
- Automate component management and tracking for team development

LiveWater enables the creation of reusable and adaptable J2EE components, thus providing competitive choices to developers and IT organizations: they can assemble applications from any combination of commercially available components and their own custom components. They are ensured that those applications are maintainable, extensible and easily combined with new solutions as their dynamic eBusiness requirements evolve.

## 2. Robust Portfolio of Reusable and Adaptable LiveWater J2EE eCommerce Frameworks

Modern eCommerce development efforts rarely, if ever, start from scratch. Developers have become accustomed to working from a starting point of foundation-level components that deliver base functionality. LiveWater provides such functionality through its portfolio of extensible eCommerce frameworks. These frameworks jumpstart the process of building your Java Component Supply Chain. The LiveWater Adaptable eCommerce Frameworks are a portfolio of business-to-business components that enable the assembly and implementation of customer relationship management, electronic purchase processing, and electronic ordering, shipping and billing.

The LiveWater Frameworks, ready for J2EE application deployment, are integrated with and readily adapted to your applications by developers of all skill levels with the LiveWater Component Design Center.

## 2. The Frameworks

### 3. LiveWater Component Definitions for Adapting and Customizing Market-Leading eCommerce and Java Application Components to Your Application Requirements

LiveWater delivers a library of predefined, adaptable component definitions for market-leading eCommerce components.

These components can be adapted, extended, and combined with your custom components and LiveWater Adaptable Frameworks with the LiveWater Component Design Center to create rich, easily maintainable eBusiness solutions.

Component Definitions deliver a unique benefit to the chain of collaboration: they enable any developer along that chain to implement customizations and extensions as necessary without breaking the chain for future releases and updates.

## 3. The Components

## 4. LiveWater Services

LiveWater has carefully crafted a set of comprehensive services that are designed to start your implementation of LiveWater J2EE solutions quickly and successfully. Our staff of component and eCommerce experts provide you with the expertise you need to help establish your Java Component Supply Chain. Our services include:

- **Your LiveWater web site**, which provides you a secure environment for:
  - Receiving updates and improvements to the LiveWater Component Design Center, LiveWater Adaptable eCommerce Frameworks, and LiveWater designable Component Definitions for commercial eCommerce and eBusiness components
  - Communicating via an online discussion area that will be established for you to interact with the LiveWater engineering and component development teams for rapid response to all of your needs
  - Providing early access to all new releases
  - Receiving all documentation and technical resources, which will be organized on your site for easy access by your development team
- **LiveWater Fast Start program**, which is designed to assist your team in integrating the LiveWater Component Design Center and the LiveWater Adaptable Frameworks with your existing Java development efforts. Online tutorials and training are available, and our team will work interactively with yours online to create Component Definitions for your existing components.

### 4. The Services

## The LiveWater Component Design Center

The LiveWater Component Design Center is a Java 2 design center and integrated toolset that focuses on automating the design, development, management, and maintenance of component-based enterprise applications. Focusing on the unique and practical challenges of application development, LiveWater enables developers to:

- Create new components
- Integrate, customize, and extend any pre-fabricated components created in any other Java environment
- Assemble components into new applications
- Deploy component-based applications
- Evolve and maintain applications and manage components - even customized applications
- Integrate with and optimize application server functionality
- Integrate with and optimize EJB data management
- Collaborate effectively with teams and other toolsets
- Maximize current resources and skills

**Solves  
application  
development  
challenges**

**LiveWater**





## The Environment for Component-Based Java Development

LiveWater enables developers to construct dynamic Internet applications from new and pre-fabricated components in an n-tier architecture. In this environment, developers can buy, build, and customize components and rapidly assemble them into business solutions that are customized for specific needs.

The need for this customization is significant. For example, global companies may need to localize their applications for use in numerous markets and in numerous languages. Commercial developers may want to customize their applications for the unique needs of different customers.

LiveWater is a Java 2 solution that enables cross-platform support and accommodates the entire market of standard components - regardless of the toolset used to create them. It standardizes the interfaces of commercial components to enable entire application development teams to collaborate on the creation, extension, customization, management and maintenance of components and component-based J2EE applications.



**Buy, build, and customize components**



## The Benefits of the LiveWater Component Design Center

The LiveWater Component Design Center can provide numerous benefits in many strategic areas

### Leverage Existing Resources -

Businesses can reuse their existing skills, tools, components, applications, systems, and resources in an efficient manner.

### Collaborative Team Development -

Component-based applications benefit from numerous participants with different skill sets, from systems-level programmers to application professionals to power users and business analysts.

**Reusability** - By tracking and inventorying components and their use, LiveWater makes reusability possible and feasible.

**Focus on Value Add** - Since there's less programming required (because system-level or basic functionality components can be purchased), development teams focus on building competitive advantage and solving business problems - not coding. What's more, by de-emphasizing coding, LiveWater gives you more time to focus on application design.

**Streamlined J2EE Implementation** - This means it's easier to design, assemble and maintain J2EE components and applications.

**No More "Rapid Rewrite"** - As much as 85 percent of the cost of application ownership comes after initial development. Customization, personalization, and adaptation to changing business rules have too often meant that teams must "rapidly rewrite" a system; LiveWater eliminates this.

**Flexibility To Customize** - Businesses can choose from best-of-breed packaged applications and use LiveWater to extend/customize their systems without voiding the warranty or breaking the relationship with the original provider.

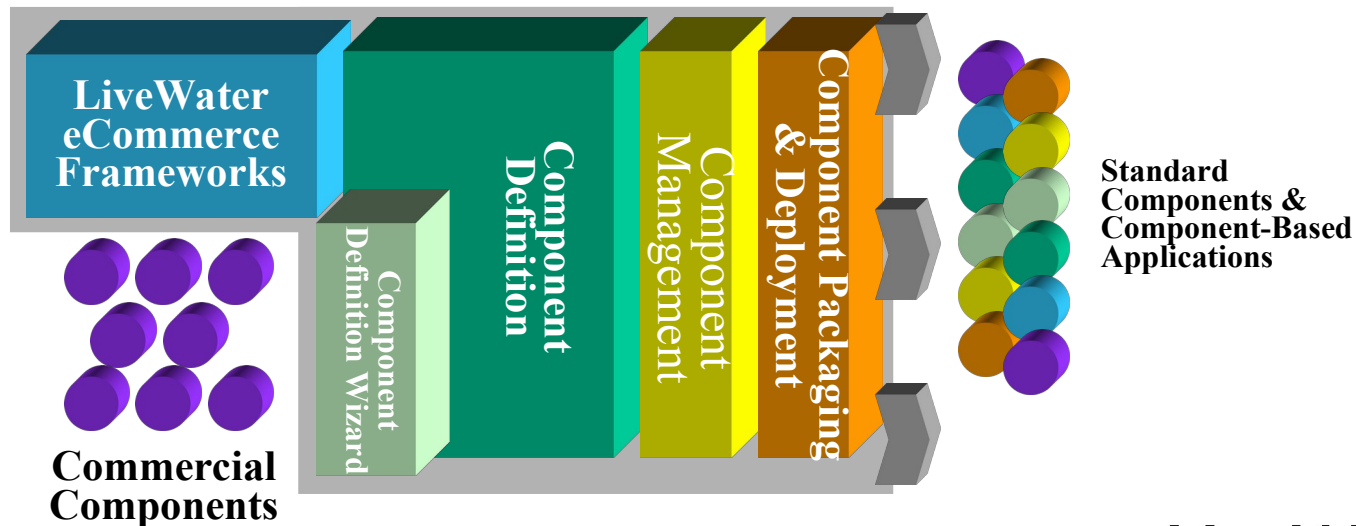
**Robust Inheritance** - Development projects start from a proven base of components for faster development and more reliable applications.

**Full Reuse of Existing Java Efforts** - You don't have to start over if your Java efforts are already in place.

## Unique Set of Technologies

LiveWater is based on a set of key innovations and features that provide developers with the proper foundation for creating enterprise applications through Java components:

- LiveWater Component Definition
- LiveWater Component Management
- Component Packaging and Deployment





## Unique Set of Technologies: LiveWater Component Definition

- LiveWater's Component Definition is the foundation of the LiveWater Component Design Center. This is an active, design-time data structure that facilitates the creation, evolution, and reuse of Java software components such as JavaBeans, EJBs, JSPs, applets and servlets.
- A LiveWater Component Definition represents all of the information on how a component is designed and how an application is constructed from components. It provides a consistent framework for: working with any component, working with any part of the application, and developing, extending, and maintaining components and their characteristics.
- It's complete, because all design-time information provided to the tool is stored in the Component Definition. In LiveWater, all functional parts of an application are Component Definitions.
- The LiveWater Component Definition generates a standard Java .class structure. LiveWater components feature an expanded set of design-time information that includes the following: Identity, State, Behaviors, and Containment.

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## Unique Set of Technologies: LiveWater Component Definition

LiveWater Component Definitions:

- Maintain complete information about a component, including the methods it has and the interfaces it implements.
- Produce software classes compatible with the JVM.
- Support inheritance through containment.
- Self-document. Each trait in a LiveWater Component Definition maintains its own documentation in a fashion similar to javadoc.
- Support organization by inheritance.

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## Unique Set of Technologies: LiveWater Component Definition (con't)

LiveWater Component Definitions offer several distinct advantages, they:

- Eliminate the need to program, except when you want to provide your own logic.
- Automatically update inherited component definitions so that all attributes are inherited. In the Java language, only method declarations and interfaces are inherited. A LiveWater Component Definition provides additional inheritable data such as state, containment, and documentation.
- Automatically adjust inherited components to resolve conflicting inheritance information.
- Provide a data structure explicitly for use with visual design tools; the structure persists as a delta - the difference between the inherited definition and the current definition.
- Provide an active data structure that's accessible by invoking the functionality of the component definition and related classes.

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## Unique Set of Technologies: LiveWater Component Definition (con't)

Design changes to Component Definitions are always stored as deltas. That is, they are stored as the difference between what was newly designed/changed and what existed previously. So, when a developer customizes or localizes a component, he's actually saving only the customization work. Those deltas are applied to the latest base component. When the base component changes, the localization or customization work is automatically applied.

## Unique Set of Technologies: LiveWater Component Management

LiveWater Component Management features bring a new level of value to Java 2 developers. LiveWater integrates core Java components, as well as LiveWater extended components to support their reuse and extension into new applications. In a world where applications are assembled components, a tightly integrated, component-savvy management tool becomes an indispensable element of successful Java development and an integral resource for a successful development team. LiveWater Component Management is an application for the development team in the same way a bill of materials application assists manufacturing operations. The important functionality delivered through component management to the team is:

- **Basic component tracking** - Tracking where and how components are used and the relationships to other components they use as well.
- **Impact analysis** - If a component is changed or the component it is inherited from has some new functionality, LiveWater enables the development team to determine what applications will be affected.
- **Versioning** - This enables the development team to track stages of development, customize versions, archive completed work, and retrieve it successfully.



## Unique Set of Technologies: Component Packaging & Deployment

The LiveWater Component Design Center provides a robust set of deployment and packaging capabilities. From a single extensible wizard-based interface, LiveWater enables automatic production of any type of deployment package - .jar, .ear, .war - with manifests and directory trees containing files. Any type of file can be deployed, including class, image, and property files. The Component packager provides fully customizable deployment behavior, enabling the developer to change default behavior component-by-component. Default behavior ensures that classes generated directly by the component in question are properly deployed, and all components and other resources that it depends on are deployed in the same container or are represented in other containers specified for runtime availability. The tool provides capabilities to handle applications that load components and classes dynamically. Also, new deployments can easily be implemented when enhancements or upgrades are made to the deployed components, saving the development team enormous time and energy.



## Delivering J2EE Solutions

LiveWater believes in building relationships with its customers based on the long-term success they will have with our tools, technologies and solutions. Our operating principles are:

- **Create Sophisticated Breakthrough Technologies** - The software development market demands that new organizations such as LiveWater deliver cutting-edge products that deliver substantial instant value to customers' existing efforts. Development tools from LiveWater are designed to inspire developers through ease of use, Java-centricity, and innovative, meaningful productivity features.
- **Innovate, Innovate, Innovate** - Innovation is the life-blood of a start-up, which must provide the market with a clear, compelling, and new advantage. An essential part of our mission is to innovate new ways of delivering products and services. The Web will be our preferred delivery vehicle as we challenge ourselves to deliver the most comprehensive site for products, services, resources and information delivery.
- **"Whatever It Takes" Service** - LiveWater understands that it takes more than eye-popping development tools to build a business. It requires a priority-one commitment to service. We believe that delivering our tools to a developer is the starting line, not the finish line. Our priority is to impart as much knowledge as possible, through comprehensive education programs, 24/7 technical support, customized Web content, and complete online documentation.
- **A Passion for Customer Success** - Success can be measured in many ways and there is room for disagreement about which is the "best" metric. One metric, however, shows up again and again as the most compelling of all: customer success. Customer satisfaction and success will be the single metric we use to measure the effectiveness of our efforts and will be the arena where we will make concentrated investment to gain market share. We have a passion for customer success.

To fulfill on these operating objectives, we have a delivery system for our solutions that fits philosophically and economically with our customer relationship goals

## Subscription-Based Development Licensing and Services

Our J2EE tools and adaptable eCommerce frameworks are delivered to your development team with an integrated set of services on an annual subscription basis. The subscription fee, which is based on the size of your development team, ensures that your organization receives the highest quality and breadth of care. LiveWater has carefully crafted a set of comprehensive services that are designed to start your implementation of LiveWater J2EE solutions quickly and successfully. Our staff of component and eCommerce experts provide you with the expertise you need to help establish your Java Component Supply Chain. Our services include:

LiveWater solutions & service programs are designed to anticipate the unique needs of eCommerce developers.

- **Your LiveWater web site**, which provides you a secure environment for:
  - Receiving updates and improvements to the LiveWater Component Design Center, LiveWater Adaptable eCommerce Frameworks, and LiveWater designable Component Definitions for commercial eCommerce and eBusiness components
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## Deployment Licensing Programs

Once you are ready to deploy, LiveWater offers a choice of deployment programs that enable you to optimize your deployment strategies:

- **Frameworks deployment** - there are several licensing options for deploying the LiveWater Adaptable Frameworks designed to fit your unique business system:
  - One-time, per-component license fee
  - Per-processor, server-based licensing
- **J2EE solution suite deployment** - for commercial software organizations, LiveWater offers an exclusive use licensing program that consists of a flexible-use base fee for incorporating the LiveWater suite in their own business and licensing programs. This program can easily be adapted to the specific needs of ISVs, eBusiness Integrators, corporate IT departments, and Application Service Providers

LiveWater J2EE solutions and services are designed with a clear understanding of the primary needs of our users.

## To Simplify Component Development and Reuse, Just Add Water... LiveWater

Get a preview and make an impact with your expertise and opinions while discovering a break-through technology. Join the LiveWater Early Access Program.

### Who should become part of the Program?

- Application Developers
- Business Application Specialists
- eBusiness Development Managers
- eCommerce Application Integrators

### What are the benefits of joining?

- Discover the value, features, and functions of reusable J2EE component based development
- Help shape the future development of the product by providing us feedback
- Receive advance notice of product releases
- Develop a relationship with an outstanding company that values your opinion

**TAKE ADVANTAGE  
OF US!**

This is a great  
opportunity for you to  
get in on the ground  
floor of a  
revolutionary  
development tool.

## Become Part of the Early Access Program

To become part of the Early Access Program, simply go to [www.livewater.com](http://www.livewater.com).

Or, you can email [eval@livewater.com](mailto:eval@livewater.com).

You will receive details, details and instructions on this opportunity that will make a difference in the way you think about applications.

Our web site at [www.livewater.com](http://www.livewater.com) has more information on LiveWater and the LiveWater products and services, including:

- White papers (<http://www.livewater.com/Product/WhitePaper.htm>)
- LiveWater Component Design Center demo (<http://www.livewater.com/Product/Demo.htm>)
- Press Releases & Announcements (<http://www.livewater.com/About/PressRelease/PressReleases.htm>)
- Executive Bios (<http://www.livewater.com/About/Management.htm>)
- Participation Request for the Early Access Program (<http://www.livewater.com/Product/Eval.htm>)

ABOUT  
LIVewater

LIVewater  
J2EE  
SOLUTIONS

THE LIVewater  
COMPONENT  
DESIGN CENTER

LICENSING  
AND  
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