



**resin**  
CONTINUALLY REIMAGINING  
THE APPLICATION SERVER

resin. quercus. candi.

## CAUCHO

## **EXPERIENCE. Web Profile, Hessian & Quercus**

Founded in 1998, our engineering shop works to develop high quality open source Java implementations used by developers throughout the world.

- + Reinvented remoting
- + Advocates of flexibility

## **INSIGHT. Innovative and Lightweight**

As early advocates of Web Profile, we are committed to simplifying developers lives by providing a tool set that is efficient and easy to work with.

- + Transparent services
- + Clean design

## **DEDICATION. Pursuit of Quality**

Relentless use of test driven development since 1998.

- + Continuous refactoring
- + Short release cycles

“We have been using Resin for over seven years now for various telecoms projects in a notoriously demanding environment. Resin has consistently provided us with the speed, resilience and flexibility we need to meet these goals, not to mention the first-class support provided by Caucho.”

— Carl Whalley, SW Dev. Manager  
OTAMate Technology

# TECHNICAL BENEFITS DEVELOPERS EXPECT

## IMPLEMENTING THE WEB PROFILE

The new Java EE Web Profile is a major upgrade to the familiar Servlets, JSF, and JPA specifications continuing to make Java the best platform for web development. The Web Profile also adds a major new foundation to the Java EE family with CDI as the dependency framework tying all the Java EE specifications into a coherent whole. Finally, the Web Profile has trimmed EJBs into EJB-lite, giving the power of EJB aspects to all web applications.

## INSIGHT INTO ADMINISTRATION

When something goes wrong, you need the insight into the system to find and solve the problem quickly. In Resin 4.0, we've built sensors and a metering system that checks the health of the system every minute to gather and store the data you need to improve your site's reliability. With built-in sensors for your memory, CPU, threading and database access, metering of any JMX value, and even allowing custom sensors into your own application, Resin gives you the visibility you need into the system. Working together with a heartbeat check across the cluster, and a health monitoring system, Resin can even automatically restart your server when necessary. With an easy to script PHP interface for REST reporting, Resin integrates cleanly with system-wide management tools like Nagios.

## DESIGNED FOR DYNAMIC CLUSTERING

Adding a server to support extra traffic and taking it down when load traffic decreases is built into the Resin 4.0 clustering architecture. Resin manages the cluster changes, taking care of shared data-like distributed sessions, caches, messaging, load balancing and failover. The heart of Resin's dynamic clustering is a triple-redundant triad of servers specialized in providing stability and reliability for the ephemeral servers that come and go as traffic changes. All of Resin's distributed services work with the triad architecture to make the system work seamlessly while the servers change.

## STAGING AND VERSIONED DEPLOYMENT

Your web application updates need to be consistent and reliable across your entire cluster. When Resin deploys your application's updates, it stores the changes in an internal, reliable, transactional version control system, and synchronizes the changes across the cluster. Upgrades, rollbacks, and staging are reliable and consistent across the system, using a triple-redundancy store to ensure your deployment's validity. In the cloud or in your private cluster, your deployment is solid.

## BEYOND HIGH PERFORMANCE APPLICATION SERVER

- + **Java EE Web Profile**
- + **Transactional logging and application management tools**
- + **Improved JUnit/TestNG/Ant and Maven support**
- + **REST integration with standard tools**
- + **Extensible PHP administration**
- + **Fast, lightweight and compact messaging**
- + **Developer features:**
  - **Live application profiling**
  - **Heap analysis**



### Java EE Web Profile

Enhance end-user experience and draw more traffic to your website with a fast, easy, highly responsive and secure site backed by Java standards.



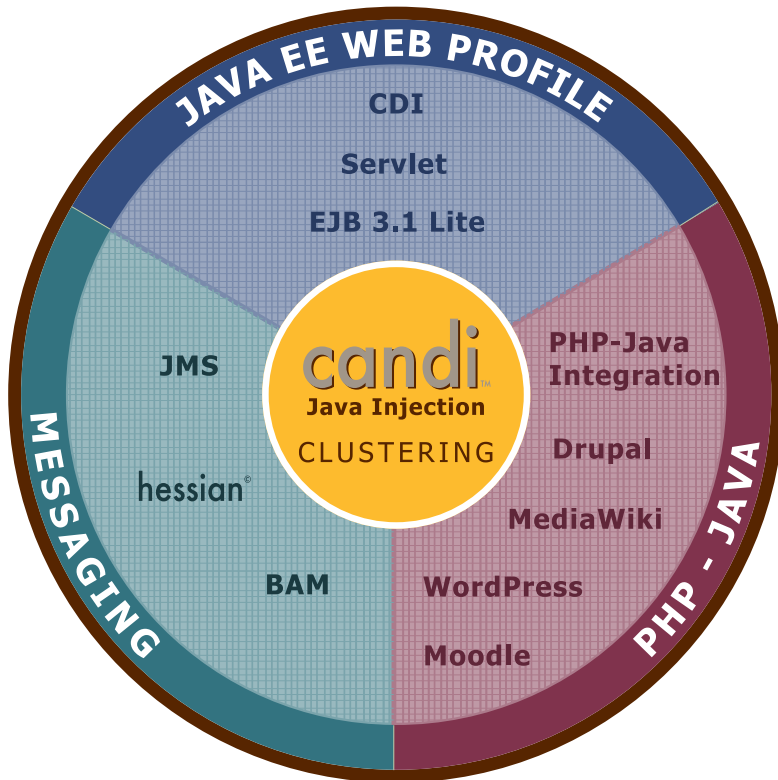
### Hessian

Create your next generation of interactive and cloud computing applications. BAM's lightweight messaging design is ideal for ERP systems, chats, games, mobile phones and web applications requiring high-speed communications.



### Quercus PHP

Add to your business-oriented Java framework with light, agile front-end PHP applications. Quercus is the only fast and open-source PHP implementation written in Java that offers full PHP compatibility and easy Java integration.



## Web Profile

The next generation of Java web development is now available. With class discovery and annotations to simplify servlet and EJB development, managed beans unified across EJB, JSF and Servlets, and advanced HTTP comet support, your application is poised to provide the latest in web design for your customers.



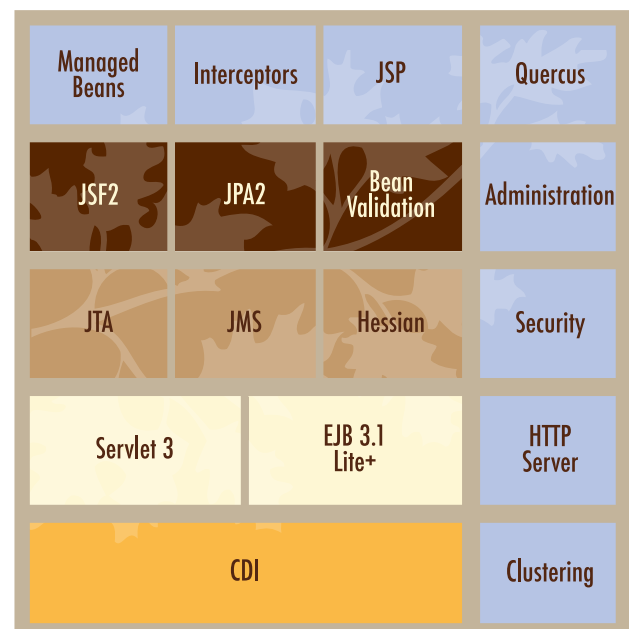
We're focused on continually improving and solidifying the core web server, refactoring and retesting the most important foundations on the web. Keeping the Resin core lightweight while adding the latest HTTP and Java EE capabilities is a challenge we embrace; creating a clustering Web Profile server with a light-weight footprint.

**"Salesforce has relied on Resin to run our market-leading CRM services for years. After evaluating competing products, we found Resin to be the most reliable, scalable and cost effective solution."**

— Dave Moellenhoff, CTO  
Salesforce.com

# candi™

Catalyze your framework or application with CanDI to leverage community extensions and encourage elegant service design. CanDI's type-safe dependency injection decouples your service from its users, increasing your framework's flexibility. Its interceptors, decorators, events and standard extension SPI gives you tools to engage with your developer community.



## JAVA EE 6 WEB PROFILE

### ■ CanDI

Catalyst for frameworks and applications to engage their development communities

### ■ Servlet

Fast, lightweight, and scalable

### ■ EJB 3.1 Lite

Lightweight enterprise aspects

## OPEN SOURCE ENGINEERING PROJECTS

### ■ Quercus

PHP on the JVM for fast and secure scripting

### ■ Hessian

Lightweight, compact binary remoting

“After using almost every available application server on the market, Resin’s stability, reliability and advanced load balancing make it the obvious choice for us. We selected Resin because of the demands that our high-visibility web site puts on the server performance.”

— Brandon Cruz  
President and CTO of Norvax

## LEADING JAVA DEVELOPMENT SINCE 1998

“We launched Caucho in 1998 as an engineering shop focused on the potential of Java, Open Source and scripting languages. 12 years later, we remain dedicated to maximizing speed, reliability and maintenance - - we’re committed to getting the details right. Our Open Source projects, Hessian and Quercus, keep us working late nights and weekends as we explore the evolving importance of lightweight messaging and PHP on the JVM. Caucho’s success is a tribute to our customers who work closely with us on a daily basis. Stop by our office the next time you are in San Francisco to chat about CDI, Web Profile or at least help us fix a couple of bugs!”

Sincerely,  
Steve Montal | Co-Founder | Caucho Technology

2010 | Gartner names Caucho in “Cool Vendors in Platform and Integration Middleware”  
2009 | Resin 4.0 released: Web Profile - CanDI, Servlets, EJB 3.1 Lite  
2008 | Resin 3.2 released: Scalability & Administration features  
2007 | Resin 3.1 released: JSF, Comet support & versioning  
2006 | Quercus released: PHP-Java implementation  
2005 | Caucho becomes a Sun Microsystems J2EE licensee  
2004 | Hessian 1.0 specification released  
2003 | e-gatematrix deploys on Resin  
2002 | CNet deploys on Resin  
2001 | Caucho & NTT Data Intramart establish partnership  
2000 | Salesforce.com deploys on Resin  
1999 | Resin 1.0 released  
1998 | Founding of Caucho Technology, Inc.

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— Steve Montal, Co-Founder

