



resin[®]

application server

by  CAUCHO



“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**

Resin application server

A Cloud-optimized Java EE certified application server featuring **Resin Cloud** support and **Resin JAMM™** (Java Application Monitoring and Management). Included in Resin's technology suite are: **Resin Web Server**, **Hessian** (fast and compact messaging), **Quercus** (PHP on the JVM), and **Resin Cache** (distributed cache server).

Resin distinguished itself as the first licensed Java EE Web Profile Certified application server and is responsible for the new wave of lightweight application servers on the market today. Leading companies worldwide with demands for reliability and high performance web applications including the Toronto Stock Exchange, CNET and Salesforce.com are powered by Resin. It is one of the oldest and most successful Java application servers in the industry with 4.7+ million sites worldwide.

Caucho Technology

Founded in 1998, Caucho is an Oracle Java EE licensee and recognized as one of the leading Java engineering companies in the world. We continue to uphold our proven reputation for craftsmanship and innovation with Resin Cloud and Resin JAMM.

CAUCHO

Projects from the engineering shop

Native Code Optimization

Resin Web Server outperforms leading C-based web servers in speed and throughput. It's web server runs over 4.7+ million global sites and continues its widespread adoption. Features include: static file handling, reverse proxy, HTTP proxy cache, SSL with OpenSSL, Load balancing, URL rewrite, CGI and FastCGI.

Quercus

Improves performance, scalability and security of PHP applications. Quercus enables Java and PHP users to deploy applications quickly in a stable, reliable enterprise environment. Java and PHP integration reduces Java development time and adds power to PHP applications.

Hessian

Hessian is a fast, compact, binary protocol that outperforms XML-based remoting protocols like SOAP and XML-RPC. It also meets or exceeds the performance of RMI. Hessian has implementations available for many languages including Java, Flash/Flex, Python, Ruby, and more.

Websocket

Websocket is an asynchronous, bi-directional messaging protocol designed for web browser compatibility. It is a broker-actor topology based on the Hessian protocol and BAM, an architectural model of XMPP (Jabber), but abstracts it to an API to allow different wire protocols underneath.



Leading Java development since 1998

- 2012 | Caucho introduces Resin JAMM (*Java Application Monitoring & Management*)
- 2012 | Netcraft reports **4.7 million sites deployed on Resin**
- 2012 | Resin handles 100,000 requests per second
- 2011 | Caucho named "Visionary" in Gartner's "**Magic Quadrant for Enterprise Application Servers**" report
- 2011 | Resin 4.0 becomes the first app server to achieve JEE6 Web Profile certification
- 2010 | Caucho named "Cool Vendor" in Gartner's "**Cool Vendors in Platform and Integration Middleware**" report
- 2010 | Resin 4.0 released: Major developments include Web Profile and EJB 3.1 Lite
- 2009 | Caucho named "Visionary" in Gartner's "**Magic Quadrant for Enterprise Application Servers**" report
- 2008 | Caucho introduces 3rd generation advanced clustering and cloud support
- 2007 | Resin 3.1 released: innovative features include JSF, Comet support & versioning
- 2006 | Quercus released: PHP on the JVM implementation that offers massive performance improvements
- 2006 | Japan's largest online gaming portal deploys on Resin
- 2005 | Caucho becomes Sun Microsystems J2EE licensee
- 2004 | Hessian 1.0 specification released
- 2002 | CNET deploys on Resin
- 2001 | Caucho & NTT Data Intramart establish partnership
- 2000 | Salesforce.com deploys on Resin
- 1999 | Resin 1.0 released
- 1998 | Caucho Technology founded

"We remain dedicated to maximizing speed, reliability and maintenance."

-- Steve Montal, Co-Founder

Resin Cloud Support

DEPLOYMENT -- Resin ensures zero downtime and consistent application deployment across the Cloud through clustering, rollback and versioning; even when servers are dynamically added and removed

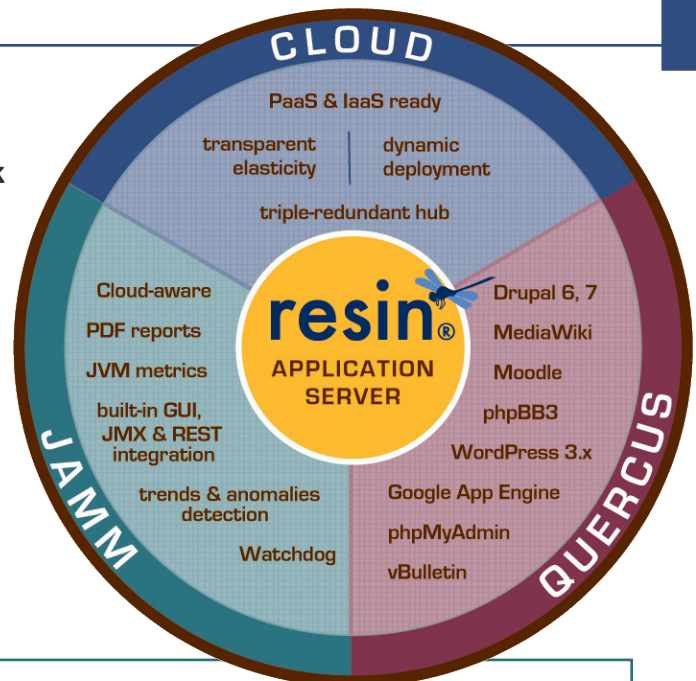
TRANSPARENT ELASTICITY -- elastic cluster members can be rapidly added or removed using a single command while cluster topology, load balancing, caching, messaging and management automatically adapt to dynamic servers

MANAGEMENT -- comprehensive browser, command-line and JMX management capability is available across the cloud

RELIABILITY -- cluster data is triple-replicated for high availability and redundancy while the elastic load-balancer and failover maintain smooth operations during server failures

“It sounds silly and over simplistic, but Resin just works! It is easy to install, it is easy to get started, it is easy to configure, it is easy to get into a cluster, it is easy to work with, it shows at every level that Caucho focused on the target of a compact, efficient, easy JEE engine and delivered.”

-- Nathan Tableman | Sr. Manager of Development | Conde Nast Digital



Resin JAMM™

(Java Application Monitoring and Management)

RESIN WATCHDOG -- a unique and independent process for non-stop Resin monitoring of application responsiveness with automatic restart, making Resin the choice application server when reliability is paramount

RULE-BASED HEALTH CHECKS -- an extensive set of customizable server health checks, conditions and actions are triggered when server health is in question (options include profiling before a crash, triggering restarts, alerts, snapshot reports and much more)

REAL-TIME GUI -- Resin-admin, a browser based GUI, provides real-time access to JMX, cluster topology, network connections, threads, memory, heap-dumps, thread-dumps, on-demand profiling and PDF reports

POST-MORTEM (CRASH) ANALYSIS -- in the unfortunate event a server fails, Resin automatically compiles a PDF report with the saved data and log files leading up to the event (report data includes system summary, metered data, thread dumps, CPU profile and much more)

TRENDS AND ANOMALIES DETECTION -- track trends and anomalies for the ability to do Just-in-Time Java Profiling

“We have found that the internal reporting tools that ship with version 4, along with its extreme efficiency are key to keeping our hardware consumption as low as it currently is.”

-- Levy Lieberman | VP, Technology | Swagbucks.com

resin[®] application server

by CAUCHO

FULL FEATURED AND HIGH PERFORMANCE

Resin includes Servlets, JSP, JSF, JSTL, EJB Lite, transaction management, messaging, remote services, distributed sessions, SSL, a complete logging solution, PHP, a fast and fully capable HTTP server and load balancing.

CLUSTERED VERSIONED-CONTROLLED DEPLOYMENT AND REPOSITORY

Resin supports running multiple versions of the same application within the same server resulting in zero downtime during upgrade of active sites. By directing users with existing sessions to older versions and new users to new versions, Resin makes the upgrade process transparent to both users.

FULL CONTROL & EASE OF DEPLOYMENT

Resin offers comprehensive control of configuration, setup and deployment for web applications. Its fully integrated configuration and management tools facilitate cloud computing by requiring only a single step to deploy and upgrade applications to numerous machines in a transactional fashion.

ZERO DOWN-TIME MAINTENANCE AND EASE OF ADMINISTRATION

Resin's well-structured and concise configuration makes it easy to get a new or upgraded site live and running quickly. Administrators can perform maintenance on faulty machines while the deployment remains live.

Quercus PHP on the JVM

PERFORMANCE with PHP-JAVA INTEGRATION -- PHP compiled to Java significantly improves performance, scalability and security of PHP applications

SPEED -- up to 3X faster with PHP compilation; yielding less servers and faster site response time

RESOURCE SAVING -- Java connection pooling to minimize database load cost

SECURITY -- 100% Java; shared security across PHP and Java applications

CACHING -- shared data for caching across multiple requests

UNICODE -- PHP6 Unicode support

PROFILER -- identify bottlenecks in performance with the integrated PHP profiler

TIME REDUCTION -- Resin JAMM integration reduces Java development time and adds power to PHP applications

CLOUD COMPUTING SUPPORT -- with Resin provides Cloud support and PHP session management

OPEN SOURCE

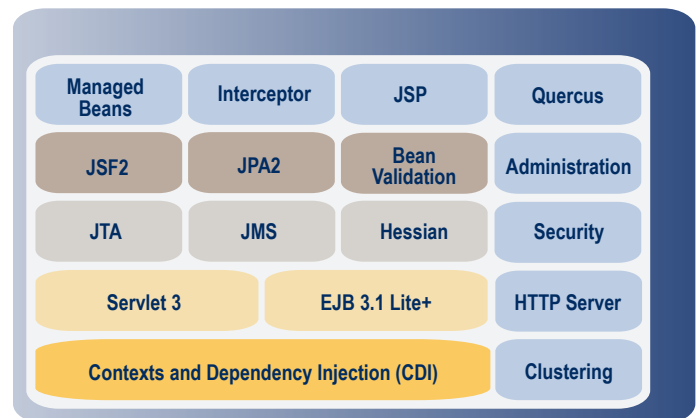
Resin is an open source application server supported by a vibrant community as well as Caucho's own engineering staff. The Resin core is released under the GPL, with proprietary optimizations available only in Resin Professional.

SCALABILITY

Resin cloud infrastructure provides a dynamic and reliable method for scaling up or down by adding or removing servers to match production load levels. From one server to hundreds, the clustering and replication architecture scales seamlessly and is optimized to run in a virtualized cloud environment.

TECHNICAL SUPPORT BY CAUCHO DEVELOPERS

Caucho offers focused and high quality technical support provided by the developers who write the code. Single-tier support reduces wait time and increases productivity for both system administrators and developers.



PHP ON THE JVM

allows for painless addition of PHP to any Java stack

BEST PERFORMANCE WITH RESIN

but works with all application servers