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Resin: A Light-Footed Java EE 6 Web Profile Platform

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The Resin Application Server

- One of the earliest successful Servlet containers
- Reputation for performance and small footprint
- Supports sites like Salesforce, CNET and Toronto Stock Exchange
- Support for EJB 3 and JPA in Resin 3.1 but not entire Java EE 5 stack
- Resin 4 targeted for Java EE 6 Web Profile certification
- Caucho only vendor focusing on Java EE 6 Web Profile
Java EE 6 Web Profile

Java EE

Web Profile

- Servlet 3
- JSP
- JAX-WS
- JAX-RS
- JASPIC
- JSR 88
- JSF 2
- CDI
- JAX-RPC
- JAXB
- JACC
- JSR 77
- EJB 3.1
- JTA
- JAXR
- JMS
- JCA
- RMI
- JPA 2
- Bean Validation
- SAAJ
- JAAS
- JavaMail
- JNDI
Resin Java EE 6 Implementation

- Caucho implementations for CDI (CanDI), Servlet 3 and EJB 3.1 Lite+
- Integrates reference implementation for JSF 2, JPA 2 and bean validation
- CanDI forms basis of Resin
- Use of annotations like @TransactionAttribute, @Schedule, @Asynchronous, @RolesAllowed, @RunAs, @Lock, @Startup and @Remote outside EJB
- High performance JTA transaction manager
Resin Java EE 6 Implementation

- Scheduling, asynchronous processing, message driven beans, lightweight JMS
- Hessian remoting
- CDI portable extensions for JMS, JDBC, JavaMail, Struts 2, Wicket, iBATIS and Quartz
- Embedded container based unit testing support for JUnit and TestNG
- `@TransactionScoped`/@ThreadScoped custom scopes
Resin Java EE 6 Implementation
The Application Demo!
Server Features

- Resource/connection pooling
- HTTP server, load-balancing, clustering, caching
- Thread/process management, bandwidth throttling
- Security/built-in authentication providers
- Administrative console
- IDE integration
- Maven/Ant integration
- OpenSSL support
Resin Deployment
Summary

- Resin aims to become lightweight Java EE 6 Web Profile application server of choice for Java community
- Use of annotations like @TransactionAttribute, @Schedule, @Lock, @RolesAllowed, @RunAs, @Startup, @Remote and @Asynchronous outside EJB
- Support for Hessian, JUnit 4, Struts 2, Wicket, iBATIS and Quartz
- Connection pooling, load-balancing, clustering, caching, security and administrative console
References

- Introducing Java EE 6
  - http://java.sun.com/developer/technicalArticles/JavaEE/JavaEE6Overview.html

- Resin

- Download Resin
  - http://www.caucho.com/download

- Resin RefCard