Redesigning of an Existing Call Tracking System

OVERVIEW & BUSINESS NEEDS

The Client is a leading Telemanagement Application service provider dealing in developing, manufacturing and marketing web-centric virtual telemanagement products, services, and solutions. The Client required an offshore services vendor to re-design the UNIX shell based application "CTS" (Call Tracking System) that processed textual data and stored it on Informix database.

CHALLENGES

- The prerequisite was to reverse engineer the existing console based application into a web application
- Implement an innovative design for the new web application where the business logic & data is kept separate from the presentation layer
- Develop and Integrate Context-Sensitive help system containing a search facility

SOLUTIONS

- RSI studied the console-based application and proposed a solution
- RSI proposed to use open source frameworks Struts and Hibernate
- Proposed solution was beneficial in terms of separation of layers, flexible application framework, reduced code duplication, centralized control, capability to configure and connect Databases without changing code, cost-effectiveness etc.
- Envisioned user-friendly GUI, implemented solution as per design, integrated context-sensitive help, migrated existing systems and undertook Integration Testing using IE and Mozilla Firefox
- Provided solution that supported CDR Processing, Trend Analysis and Expense Management
- Report generation assisted in analyzing the current trend analysis of the call records to predict current trend such as the busiest hour, department having maximum call records etc.

- Client could analyze the department having maximum bill generation on the basis of call details along with their mapping in terms of hours, location etc.

TECHNOLOGIES USED

- **Presentation layer:** JSP, Apache Struts, Tiles and Layout Tag Libraries
- **Business Logic:** custom Java code
- **Data access layer:** Hibernate 3.0 (Object Relational Mapper)
- **Languages:** Java, JSP, JavaScript, Shell Scripting, Sed, AWK, RDB, CSS and XML
- **Web server:** Apache Tomcat 6.0
- **Database layer:** MySQL 5.0
- **Platform:** Linux
- **IDE:** Net Beans
- **SCM:** SVN and CVS