

Recruiting and In-Processing System

Implemented Using Macromedia® ColdFusion™ and Oracle®

BUSINESS NEED

A large national I.T. staffing and solutions provider required the ability to manage the total business process related to the identification, qualification, recruiting, hiring and management of Technical Consultants (TC's). A web-based solution was required to support nationwide access by all departments of the company, including sales, recruiting, delivery, management and administrative personnel. Data from the recruiting system needed to automatically feed into the job order, HR and financial systems to reduce the overhead of hiring and managing TC's. The selected technology needed to support a business process that was unique to the client.

DESIGN

Upon establishing initial business requirements, the client researched the capabilities of commercially available systems. After an extensive search it was determined that the commercially available products did not meet the requirements. However, one system had the basic capabilities and could be modified. It was therefore selected to be the core of the system, and modified to meet exact requirements.

The goal of the initial rollout was to provide a system for use by three groups of people; employees, potential TC's and partners. A second phase produced a web site for use by our client's customers to enter and manage job requisitions and placements.

In the first phase, two web sites were produced. One served employees and one served TC's and partners.

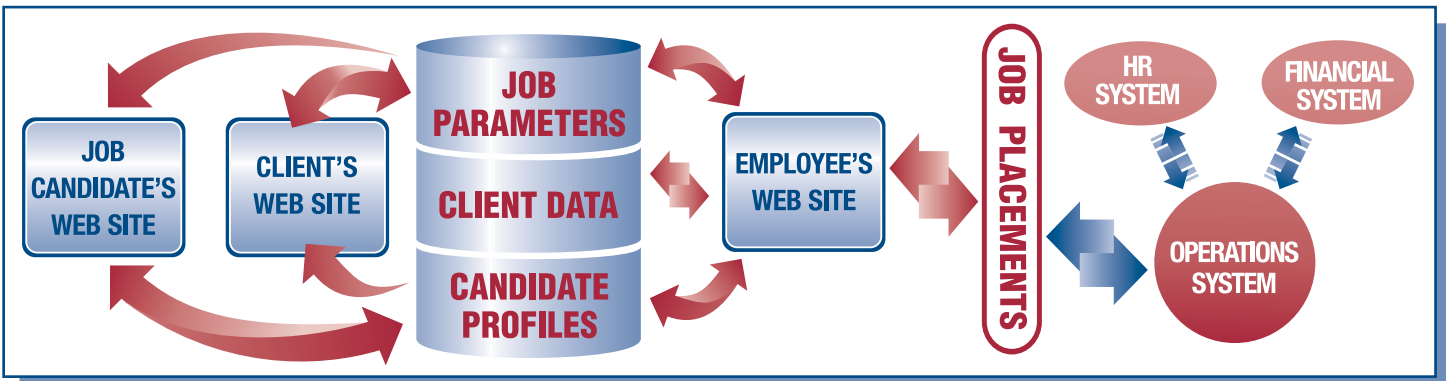
The employee site needed to be completely restricted so no functionality was exposed unless the individual was properly authenticated. The second site needed to have information exposed to the public, plus have private areas where an individual could maintain profile information.

The system needed to be capable of handling hundreds of concurrent users and be "near 24x7" to support the access habits of the users.

To meet availability requirements, an Application Service Provider (ASP) was selected to host the application. Their capabilities included multiple shared web servers arranged in a load-balanced configuration, and a dedicated database server. Locating the system at the ASP required a strategy for integrating it with the client's back-office systems, which were located in a different geographical location than the ASP. The solution was to open a secure communication port for use by special communication processes, facilitating the bi-directional data transfer between the back-office systems and the recruiting systems.

The two web applications (employee and TC/partner) were designed to share a common database. Doing so allowed information to be instantly available between the applications, eliminating the complexities and latencies of transferring and updating multiple databases.

A third web application was designed, developed and deployed as part of the second phase of the project. This application was directed at the needs of the client's customers. It was also deployed at the ASP, and shared the same common database.



ACCESSIBILITY CONCEPTS

One of the key goals of the employee site design was to control user access to functionality and to data. In the former case, limiting functional access to selected employees was critical to ensure proper workflow, data integrity, job assignments and accountability. In the later case, data “scoping” was desired so that employees viewed data that was most important to them. These two concepts needed to be implemented without excessive administrative actions. The solution was to integrate job code information from the PeopleSoft® HR system, job order personnel assignments made during the normal TC in-processing workflow, and user profile data. The security logic used this hybrid information to control site access.

The third web site also had accessibility constraints. This site is password protected, and used by our client’s customers. When the customer logged in, their profile determined the scope of the data they can see, and the functions they can execute. Management of these profiles, data elements and functions occur from the employee web site, and are performed by customer-specific administrators and relationship teams, ensuring an efficient business process.

OTHER FUNCTIONAL HIGHLIGHTS

The three web sites contain a wide variety of functionality. Explaining all of it is beyond the scope of this document. But a few features included in the software are worth noting:

- Full-text indexing technology for searching text records stored in the database, including resumes and job descriptions.
- Document upload and retrieval, with document “filing” according to data object and record.
- Automatic e-mail notifications transmitted to alert individuals of work flow status and error conditions

CHARTWELL I/T ROLE

Chartwell I/T participated in the project from the early analysis stages through the implementation of both main phases. Chartwell I/T filled the key software architect role, performing the following tasks:

- Review and advise on the capabilities of commercially available software systems
- Analysis and advise regarding the in-house hosting vs. outsourced hosting decision
- Composition of outsourced hosting Service Level Agreement (SLA) specifications
- Business process review, discussion and recommendations
- Architect and design final software and system solution
- Leadership and mentoring of software developers
- Software development

Besides Chartwell I/T’s participation, the project team also consisted of client and vendor resources to fill the roles of project manager, software developers and business analysts.

TECHNOLOGY

Macromedia® ColdFusion™ 5 was chosen as the application server platform. The application server runs on load-balanced Windows 2000 Server™ systems, running Internet Information Server 5.0 (IIS 5.0), which works in conjunction with ColdFusion™ to deliver the application content.

The web applications utilize an Oracle8i® Relational Database Management System, Enterprise Edition running on a Windows 2000 Server™ system. The Oracle® *interMedia* cartridge is used to provide full text indexing.

Secure Sockets Layer (SSL) encryption technology is used to protect sensitive information.

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