

## **CASE STUDY:**

### **REAL ESTATE ENTERPRISE INTRANET PORTAL**

## **CLIENT DESCRIPTION:**

The client is a large facility and real estate management enterprise with an expansive nationwide portfolio of properties under its management. In support of its operations, the client was maintaining several databases and systems to serve the needs of their clients. Many of these databases contained duplicate information (e.g., building name, address, property manager, etc.) and possibly inconsistent information. Additionally, in some cases, a process such as entering information occurred two or three times in repetition by different people, all using the same data but supporting different data management structures and databases. The client sought to enhance the delivery of real estate services to its business unit customers through the application of web-based technology. Specifically, executive management identified the following initiatives and challenges: enhance the portfolio of value-added services provided to its customers, enhance the existing tool set to improve business process efficiency, and continue consolidation of the organization into one corporate entity and co-operative team.

The client required an Intranet portal to support a widely distributed workforce with limited access to organizational resources.

## **CTA ENGINEERING OBJECTIVES:**

The scope of the initial project was to provide three on-line capabilities: an Emergency Response Center; a Project Request and Tracking application; and a Clearinghouse function for office equipment and furniture. The on-line Emergency Response Center would improve communication with clients and business unit managers during a disaster or facility emergency by providing secure access to emergency response reports showing real-time status of building recoveries during and after local and regional emergencies (e.g. floods, earthquakes, fires). The Project Request and Tracking capability allowed over 110,000 customers to request property projects (e.g., renovation, relocation, and construction) and to track the status of requested projects. Additionally, this capability automated the CPG business process for project assignment and reporting. This soon became the flagship application of the portal and has processed over 8000 requests for service in first 12 months of operation. The Clearinghouse function would improve the utilization of excess furniture and office equipment throughout the enterprise. Customers were permitted to input information, including pricing and timing, and assume responsibility for negotiation and delivery of excess assets. For all of the above capabilities, the Intranet interfaces with an SAP database to allow users to “drill down” through property and project information.

Leveraging the success of the initial rollout of the portal, CTA has since augmented the initial capabilities and continues to bring critical business process to the portal. Some of the additional online applications already deployed or in development are discussed below.

## **SYSTEM ARCHITECTURE:**

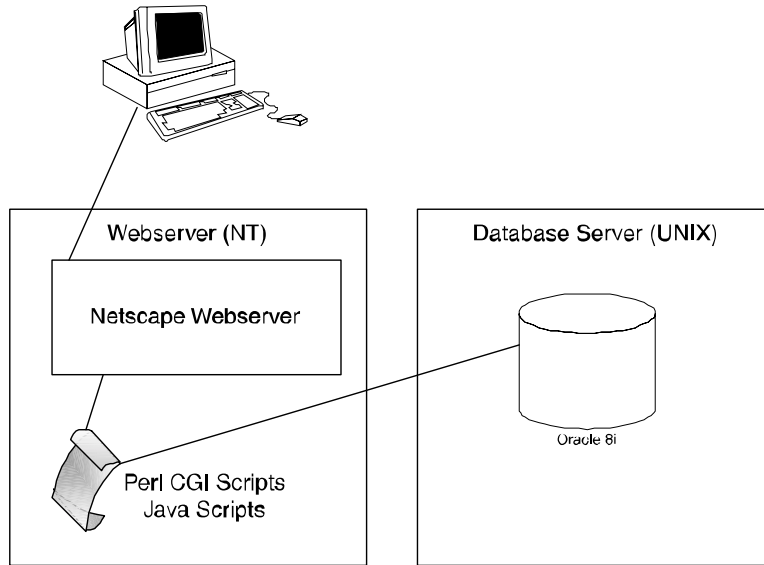
The Intranet portal is an n-tier implementation application, shown in Exhibit 1, consisting of the following components.

- Netscape Enterprise Server Webserver
- CGI Perl Scripts
- Java Scripts

- Oracle 8i Database

The portal is accessed through an SSL-secured website to enhance security and is available only from within the client's LAN.

The perl and Java scripts access the Oracle 8i database through the use of the DBI v. 1.20 and DBD-Oracle v.1.12 perl modules. The perl scripts run as regular CGI scripts to generate the HTML response to the Netscape Webserver.



**Exhibit 1 Internet Portal Architecture**

## FUNCTIONAL CHARACTERISTICS

Two key benefits of the Intranet portal are automated communication and centralized reporting. The system also interfaces with enterprise-wide applications such as SAP (financial system), Strategen (lease management system), Aperture (occupancy tracking system), and other client-specific systems, as well as hosting a data warehouse that serves as the enterprise's primary online reporting and decision support system.

### Features

The purpose of the Intranet portal has always been to provide the tools and services to internal employees and external customers in the most timely and convenient manner possible. Site features are continuously being augmented and enhanced. The site encourages user feedback and permits users to submit feedback regarding current features or suggestions or requests for future services using an online feedback form at the bottom of each page.

### Security

The Intranet provides different services to different users. Any user within the enterprise can browse the site without logging in. However, logging in provides increased options. For example, customers can log in to list an item in the clearinghouse or submit a Request for Services. Specified users can input emergency response information or assign projects when logged in. Security is assured through role and responsibility-based assignments to appropriate users.

## Online Application Suite

- **Property Management Services:** The portal is the primary source of property information within the organization, and permits authorized users the capability to view information on a single property or the entire portfolio. Functions include property manager lookup and viewing the portfolio inventory.
- **Project Request and Tracking:** Customers can request services via an online Request for Services form. Designated employees then assign the project and update its status using online tools, and the customer is notified through an automatically-generated e-mail message. The customer can track the status of the project online, as well.
- **Emergency Response Center:** During an emergency event, personnel can submit status reports and customers can view event response narratives and reopen dates online.
- **Web-based Budgeting:** The yearly budgeting function is completed online as the property management hierarchy accesses and updates financial information for individual properties, which is automatically rolled up to regional and corporate levels.
- **Lease Management:** Lease managers and negotiators access and update lease information online, and changes are automatically communicated to property management, contract management, accounting, and other relevant parts of the organization.
- **Clearinghouse:** Both CPG employees and customers can advertise available equipment and space or search for advertised items online so that resources are better utilized.
- **Other Online Services:** A dynamically managed Home Page with an online publishing capability allows management to provide timely information to portal users.

### BENEFITS TO CLIENT:

CTA provided the client with a robust and flexible web-based Intranet portal that has (1) enhanced the delivery of real estate services to internal and external customers through the application of web-based technology, (2) provided a suite of on-line tools and information that facilitate the application of best practices across the organization, and (3) significantly simplified and automated property operations and management.