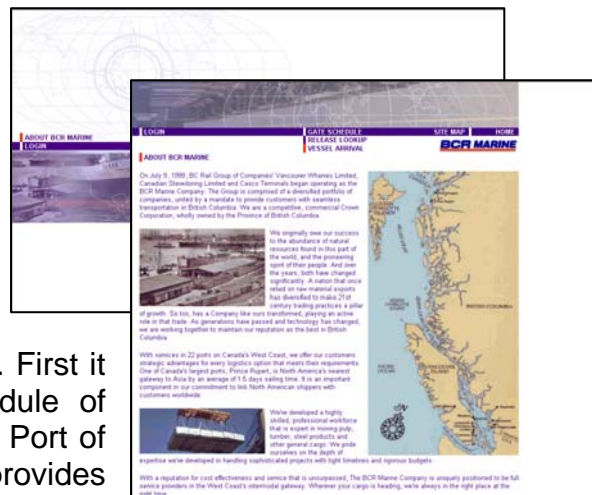


BCR Marine Container Tracking E-Commerce Site

SPOT SOLUTIONS completed this project in the summer and fall of 2000. This project was managed and completed by a **SPOT SOLUTIONS** team. The majority of work was completed at our office, although there was a lot of interaction with the client from the project conception through implementation. Meetings and integration of the system took place at various client locations.

Project Summary

This Business-to-Business E-Commerce web site was designed as a working application to track shipping containers for BCR Marine's Vancouver port operation. Besides presenting a professional corporate persona, this system performs three major functional tasks. First it shows the general public the schedule of ships arriving in and leaving from the Port of Vancouver. Second, this application provides a private login area for truckers to make appointments to deliver and pick up containers from the BCR Marine port facilities. Third, this application provides the general public as well as registered users the ability to search for the status of particular containers or whole cargos.



- Displays and edits data using real-time link to live production database.
- Implemented secure access to selected corporate Intranet components.

Technology Synopsis

Web Site	HTML, ASP/VBScript, JavaScript, Java, IIS 5.0, MS FrontPage, Visual Interdev 6.0, Crystal Reports 7.0, Netscape Navigator 3.0 -> 4.7MS Internet Explorer 4.0 -> 5.0 ... plus misc. Utilities
Database	SQL Server 7.0, ODBC ... plus misc. Utilities
Networking	TCP/IP, Peer-to-Peer, VPN, LAN, WAN ... plus misc. Utilities
Graphics	Corel Draw / oPaint 9.0 ... plus misc. Utilities
Operating Systems	Windows 2000 Prof. Windows 2000 Advanced Server, Windows NT 4.0 ... plus misc. Utilities
Business Analysis	JAD, Client-Server

The Challenge

The client is one of the largest container ports on the West Coast. They are continually trying to improve their workflow processes and improve the service they provide to their own clients - the shipping, trucking and rail companies. The client already tracked data on their various operations. However, they wanted to provide some of that information to the transportation companies as well as the general public.

The Solution

A large variety of critical pieces of technology were assembled to meet this challenge.

ARRIVAL DATE	DEPARTURE DATE	VESSEL	VOYAGE	HOMEBASE	EXPORT C/U
24-Aug-09 09:00	8-Apr-09 09:00	CLAR	086, 084	23-Sep-09 09:00	21-Aug-09 09:00
24-Aug-09 09:00	15-Mar-09 09:00	DANU	086, 084		21-Aug-09 09:00
14-Aug-09 09:00	15-Jul-09 09:00	JAN SERRAVALLO	205, 204		14-Aug-09 09:00
8-Aug-09 09:00	8-Aug-09 09:00	WESTCOAST JASCO	82, 82A		8-Aug-09 09:00
8-Aug-09 09:00	2-Aug-09 09:00	WESTCOAST JASCO	88, 88A		8-Aug-09 09:00
22-Aug-09 09:00	22-Aug-09 09:00	WESTCOAST JASCO	87, 87A		22-Aug-09 09:00
22-Aug-09 09:00	24-Sep-09 09:00	WESTCOAST JASCO	86, 87A		22-Aug-09 09:00
19-Aug-09 09:00	20-Aug-09 09:00	WESTCOAST JASCO	23, 23A		19-Aug-09 09:00
16-Aug-09 09:00	17-Aug-09 09:00	WESTCOAST JASCO	12, 12A		16-Aug-09 09:00
15-Aug-09 09:00	15-Aug-09 09:00	WESTCOAST JASCO	100, 100A		15-Aug-09 09:00
13-Aug-09 09:00	13-Aug-09 09:00	WESTCOAST JASCO	22, 22A		13-Aug-09 09:00
10-Aug-09 09:00	11-Aug-09 09:00	WESTCOAST JASCO	071, 071A		10-Aug-09 09:00
8-Aug-09 09:00	8-Aug-09 09:00	WESTCOAST JASCO	086, 084		8-Aug-09 09:00
7-Aug-09 09:00	10-Aug-09 09:00	WESTCOAST JASCO	086, 07A		7-Aug-09 09:00
8-Aug-09 09:00	8-Aug-09 09:00	WESTCOAST JASCO	23, 23A	24-Aug-09 09:00	8-Aug-09 09:00
8-Aug-09 09:00	13-Aug-09 09:00	WESTCOAST JASCO	171, 16A		8-Aug-09 09:00
20-Aug-09 09:00	21-Aug-09 09:00	WESTCOAST JASCO	086, 084	20-Sep-09 09:00	20-Aug-09 09:00
17-Aug-09 09:00	18-Aug-09 09:00	WESTCOAST JASCO	22, 22A	17-Aug-09 09:00	17-Aug-09 09:00
11-Aug-09 09:00	11-Aug-09 09:00	WESTCOAST JASCO	086, 084	17-Aug-09 09:00	11-Aug-09 09:00
13-Aug-09 09:00	8-Aug-09 09:00	WESTCOAST JASCO	071, 071A	20-Aug-09 09:00	13-Aug-09 09:00

It was recognized that a web-based process was the most efficient way of providing the required information. The client identified the general requirements of the application, and then the Spot team was brought in to develop the solution. Besides being a corporate web site for the company, there were essentially three sections to the application.

The web site was designed to show the schedule of ships that are arriving in and leaving the Port of Vancouver. This section of the site is available to the general public.

Another component of the web site was to book truck schedules. This was a very important item to the business operations of the company since they continually swing between being very busy in the yard when a bunch of trucks show up to pick up or deliver shipping containers, and having too much down-time for equipment and staff when no trucks happen to arrive. In order to make the process more efficient, the client began making trucking appointments. The application we developed to do this consisted of a very intuitive web page interface that both displays the current status of the gate appointments for a

Time Slot	LOADS	EMPTIES	IMPORTS
07:00-08:00	18	18	7
08:00-09:00	28	18	7
09:00-10:00	12	8	7
10:00-11:00	18	8	7
11:00-12:00	28	18	7
12:00-13:00	28	8	7
13:00-14:00	28	18	7
14:00-15:00	18	8	7
15:00-16:00	12	8	7

given trucking company, and allows the addition and deletion of different types of appointments. The application also allows the scheduled appointments to be summarized and printed. In order to facilitate this, the application interfaced in real time with the back-office database system of the client.



The last major component of this application was that displaying and editing of the shipping container statuses. The general public has access to this site so that, with a container ID number, they can find out the current status of that container (whether in port, held for customs, etc.). For shippers, a little bit more depth of access is available. Shippers, when properly logged in, can call up a roster of all of the containers for an

entire ship, or view the status of individual or groups of containers. The shipper is also able to make certain changes to the status of containers using this interface.

At all points during the development, particular attention was paid to allowing this application to be accessed from other Business-to-Business applications. All of the public data can be accessed from other web sites either through hypertext links to the particular page, or by capturing the data by an application directly.

Interfacing this application into the client's existing system required extensive technical consultation by the Spot Team. The client was extremely pleased with the result and looks forward to the savings to their business operations and better service provision to their clients.