

Developed a feature-rich online portal for a company in North America that helped them build a strong first mover advantage



Clarion Technologies  
A CMMI LEVEL 3 COMPANY



### Executive Summary

Clarion leveraged its expertise on web technologies to develop a portal for a large company in North America. The portal enabled the users to see current vehicular traffic across USA borders through video feeds, images, and text updates. Also, the mobile version of the portal offered an anytime access to the web content.

Such a strong and functional portal not only enabled the client to have a strong list of subscribed customers, but also opened a new revenue channel of online advertisements.

### The Client

The client is a group of professionals providing consultancy services and solutions to enterprises and individuals in the field of business development, marketing, finance, public relations, and much more. The client is based in North America.

### Business Situation

The client wanted to build an online portal which will enable its business users to know cross-border traffic between Mexico-USA and USA-Canada. The client had placed IP cameras at strategic locations on these borders. These cameras were designed to take a minute long video at every three minutes.

The client wanted to broadcast these video clippings on the portal and also wanted mobile compatibility for both the portal and video so as to facilitate easy viewing through any mobile device. This will help its users to optimize their travel time.

With this vision the client approached Clarion to build this from concept to an end product.

## Technology

The team was required to be proficient in:

- CSS
- Javascript
- VS 2008
- SQL server 2008 express
- C#
- ImageMagick
- FFMPEG
- Microsoft rewriting module
- Microsoft enterprise library for data interactions
- Olivia payment integration module for Authorize.net
- OpenSTA
- Microsoft Team Suite

## Business Benefits

The client achieved the following business advantages:

- A strong new business opportunity
- A competent and a trusted offshore technology partner to execute all development and design tasks for future product enhancements

## Challenges

It was a challenge for Clarion to showcase its expertise and win client's confidence, especially since the previous team had failed to deliver the product. However, the client was impressed by Clarion's infrastructure facilities and sound expertise on web based technologies.

The end product was critical towards building a strong revenue channel and some of the major challenges faced by the team at Clarion were:

- Ensuring video compatibility across all mobile devices: Windows, Android, Palm, Symbian, and Blackberry
- Developing a mobile version of the portal which would self adjust based on the mobile screen resolution
- Enforcing a strict security check on the portal's prime asset- the video
- Building a multi-lingual feature for the content- for both the web and mobile portal

## Solution

Clarion had an existing skill set and processes for this development project. It took six months for Clarion's dedicated team of four to design, architect, develop, and test the portal. A few of the salient features of this portal were:

- Converting the recorded video to avi format before placing it on the site server
- Converting the avi format of the video to swf format for easy viewing across all web browsers
- Converting the avi format of the video to mp4 format for seamless viewing across all mobile platforms
- Overlaying the site logo on the video content before the broadcast
- Enforcing security measures to ensure only authorized and VIP users can view certain videos and updates
- Providing users the ability to directly manage their subscriptions right from their site account

Other than the video, the client also wanted to provide traffic updates through text and images sourced from government and other sites. Clarion's team was closely working with these third party teams to seek permission and ensured the portal could easily synchronize itself to showcase live updates in form of text and images. The team also got a W3C validation certificate so as to ensure that the portal seamlessly works across all mobile devices and browsers.

As the next step, the portal underwent an extensive regression, load, scalability, and reliability testing with various mobile simulators and actual devices at Clarion. The team also used OpenSTA and Microsoft Team Suite for load testing of the portal. The resultant was an optimized site ready to serve more than 1000 simultaneous users. Clarion actively used open tools and frameworks to develop the solution so as to optimize every dollar invested by the client.