

## About C3 Solutions

C3 Solutions is a global leader in providing Yard Management and Site Flow solutions across a wide range of industries. Their solutions allow customers to optimize the activities in their shipping and receiving yards, enhancing supply chain efficiency and lowering yard management costs.

Founded in 2000, C3 Solutions has seen 7 years of continued growth, with an impressive roster of Global 5000 clients in manufacturing, grocery, retail, and parcel post. Yard Smart, their flagship product integrates with most logistics and ERP systems on the market today. The company is headquartered in Montreal, Canada and supports an installed user base across Europe and North America.



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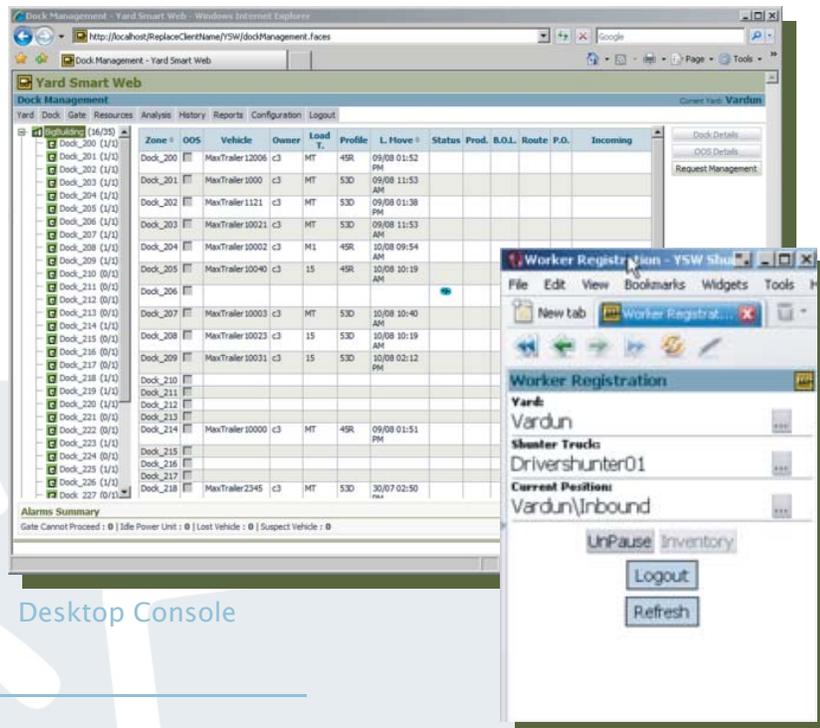
## The Problem

Yard management involves coordination and optimization of activities between a company's shipping yards and receiving docks. For many organizations, the yard still works on a combination of white boards, message runners, and walkie-talkies to coordinate and schedule trailer movements and loading dock scheduling. C3 Solutions set out to develop a system that would revolutionize the way yard activities are scheduled, communicated, and processed.

The solution needs to combine dock scheduling with back-end inventory management and reporting systems. Dock managers running the desktop system have to coordinate in real time the activities of gate guards and shunter drivers responsible for moving thousands of trailers between hundreds of docks on a minute by minute basis. Scheduling information, directions, and status updates have to be broadcast to and from mobile clients that are spread across large multi-acre sites.



From a technical perspective, C3 Solutions required a rich internet application technology that integrated seamlessly with their existing J2EE-based product infrastructure. The associated component suite had to provide broad range functionality, and still be suitable for deployment across a mix of desktop and mobile environments, without overtaxing the limited resources of the mobile devices. Last but not least, the technology had to support the notion of real time, asynchronous content delivery (Ajax Push) between the mobile and desktop clients.



Desktop Console

Mobile Interface  
(Opera Mobile Browser)

## Why ICEfaces?

“After having evaluated a number of prominent Ajax technologies we settled on ICEfaces as the only viable solution for our problem. The richness of the component library met our needs, and the server centric nature of the product integrated well with our existing J2EE infrastructure. We were able to achieve in days what previously took weeks to accomplish using low-level JavaScript programming.” says Maxime Turner, System Architect.

“The key deciding factor for us, however, was the ability of ICEfaces to support both desktop and mobile environments. The shunter driver client deployment is targeted at the Symbol CE mobile device (amongst others), and support for the Mobile Opera browser in ICEfaces was critical to our success. The icing on the cake was the ICEfaces Ajax Push technology. This allowed us to push updates and messages to and from mobile users in real time, making it possible for dispatchers and drivers to coordinate yard activities via the Yard Smart application. The capabilities in ICEfaces allowed us to extend the feature offering and performance of our solution, and positioned us to further differentiate our product in an increasingly competitive market.”

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Maxime Turner  
System Architect, C3 Solutions

