

# The right connections



The port-ship communications interface needs to be seamless to combat rising congestion and improve operations. **Stuart Butts** explains



This year, port executives around the world will be looking to advance the position of their ports in today's fast changing global trade environment by significantly improving operations. And one strategic way that port executives can achieve this is by fostering a connected port community system featuring real-time online information exchange with ships for faster import and export clearance processes.

The benefits of this approach are obvious: a well-connected port community means that port congestion is dramatically reduced. Ports can lower costs by being able to reduce clearance times and serve an increased number of vessels with unprecedented speed – and greatly increased customer satisfaction.

The motivation to achieve this vision is competition. Shipbrokers typically base their voyage calculations on expected port congestion. Ports that can rapidly process customs, excise and other data efficiently have a distinct competitive advantage in their logistics supply chains.

Many port executives share this vision. The challenge is to find a cost-effective solution that provides real-time exchange of the high volumes of critical business and regulatory information between harbourmasters and customs, required in today's ports.

One of the root causes of this problem is the incompatibility of communications formats between

ships and the various elements of a port's logistics chain. As a result, the IT systems of ports and harbours cannot route, in real-time, vessel-related information to staff and logistics chain partners to notify them of the actions they must take to serve incoming and outgoing ships. Often port staff members must manually input the information they receive from ships, causing delays in processing requests emanating from ships of up to 15 to 20 hours per transaction. By current standards, this situation is becoming unacceptable as ships strive to drive profitability by cutting costs associated with port congestion delays.

Ports need to address the critical technological challenge of communicating via a constantly changing array of multiple disparate communication protocols, data formats, and data types such as Electronic Data Interchange technologies, e-mails, phone calls, and faxes. Failure to meet this challenge leads to errors and delays.

To succeed, ports need to seamlessly and rapidly process this wide variety of data formats and media and transform them to common XML standards used by internet-enabled systems. In a nutshell, this is the strategic competitive advantage that data transformation technologies deliver to ports today. And, this is why port executives who recognise the business value of this technology are integrating these

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solutions into their operations or are planning to introduce new business models, applications and services made possible by internet-based electronic exchange of data between shippers and back-office port applications.

Port infolink provides software and logistics for the Port of Rotterdam, arguably the most demanding port in the world. The Karachi International Container Terminal (KICT) is Pakistan's leading container handling facility and the first pilot site for the Customs Administration Reform (CARE) Project, an in-house

initiative of Pakistan Customs and Central Board of Revenue. Both organisations have implemented terminalONE™ from software vendor Xenos Group Inc for high performance transformation and exchange of data in multiple formats across the Internet.

From its operation center, Port infolink provides real-time inbound and outbound supply chain management including barge planning 2.1, rail planning, road planning, customs scan process, veterinary inspection process, transit declaration, vessel notification and declaration cargo EDI.

“Over 300m tons of cargo pass through our port and that translates to a lot of paperwork,” says Bart Roozekrans, managing director at Port infolink. “Port infolink looked to Xenos when we needed a robust, standards-based solution that was scalable, extensible and service-oriented to integrate with a multi-platform global supply chain infrastructure. The Xenos solution was the logical choice.”

Through integration with Xenos, Port infolink created a common online platform to handle more incoming and outgoing data from transport agents and ship operators. A powerful data transformation engine links EDIFACT to XML and an Oracle database, enabling future expansion with maximum flexibility and adaptability to handle multiple data formats. Port infolink can now deliver a wide range of real-time services to ships. The result: a reduction in the



processing time for custom notification and declaration of a vessel from 10 hours to about 20 minutes for the administration and physical delivery of documents.

KICT is another innovative port organisation that selected Xenos. KICT is another innovative non-standard EDI messaging and various international standard EDIFACT formats for excise data. These incompatible data formats made communication between KICT and multiple shipping lines, business partners and government agencies a time-consuming procedure.

“To implement the Customs Administration Reform (CARE) project within our timelines, we looked for a

solution that is easy to use and manage,” says Anwer Umed Ali, chief technology officer, KICT. “The Xenos software meets our criteria for a solution need that is scalable, cost effective and time efficient to satisfy our service level commitments.” The software is triggered on a planned, scheduled or event basis, such as time-of-day, berthing of a vessel, ETA of a vessel, or entry of a particular container in the yard. Once triggered, it translates existing KICT EDI messages to the CARE XML formats.

*Stuart Butts is chairman and chief executive of Xenos Group, a provider to global ports and other industries of software solutions for real-time information capture, transformation, transportation and presentation.* **PS**

## New year, new strategy

Get ready to meet a new strategic priority in 2007 by following these eight steps:

1) Define the vision. Check with your IT Department if your port already has in place data transformation and re-purposing technology. If the answer is yes, ask your IT executives to provide you with an analysis of the business value of replacing older technology with the latest high performance solutions. This way, you can make informed decisions and drive effective change in your port's IT department.

If the answer is no, ask your IT executives to make it a priority to adopt new best-in-class data transformation technology in 2007.

And, find the budget to make it happen.

2) Set a deadline for adopting the new data transformation technologies in 2007. The longer you wait to implement this strategy, the greater the risk of losing valuable and repeat business to other more technologically advanced ports.

3) Become part of the solution. Champion the idea that standards-based data transformation technologies can empower your port to create an online port community that functions efficiently in today's fast changing global trade environment.

4) Optimise. Make the adoption of data transformation technologies a critical component of your

business strategy to attract more ships to your port and to increase profits.

5) Make data transformation technologies a vital part of your expansion plans. If your port is in the process of expanding, make sure that high performance data transformation technologies are on the IT agenda for 2007. It is simply a competitive factor that should not be overlooked in marketing the benefits of your port.

6) Think new business managed services for ships. With standards-based data transformation technologies, you will be in a position to create a new series of managed business services based on real-time actionable and reusable information.

7) Overcome the challenge of “don't understand, don't buy”: Deal with a vendor that is experienced in providing high performance data transformation solutions to leading ports and can help you understand the tangible benefits of implementing such an approach in your port.

8) Expect to derive sustainable value if you make the decision in favour of a port community system that uses data transformation technologies. Investing in data transformation solutions is a smart idea if your port plans to be around the block a very long time and to improve its operations. Doing so is keeping up with the pace of technological change.