



Customer Reference Story | Hong Kong Air Cargo Terminals Limited | Logistics | Application Modernization

## AN ENDURING PARTNERSHIP ENSURES AN AIR CARGO TERMINAL'S SUCCESS

### Challenge

Provide rapidly-deployable, value-added services to meet customer needs while managing high volumes of data and maintaining zero-failure reliability in all critical systems.

### Solution

According to Andy Bien, Hactl's General Manager of Information Services, "Software AG's Natural, Adabas and webMethods EntireX are crucial to Hactl's 24 by 7 operation, providing speed, reliability, and accuracy to our daily operations. This is no easy task given the sheer amount of cargo and business-related data that we handle every day." With Software AG as its partner for close to 30 years, Hactl has enjoyed consistent progress.

### Benefits

- Increased responsiveness to volume fluctuations and tight deadlines
- Increased agility, with the ability to use disparate applications across legacy systems
- Reduced costs through reuse of homegrown software components
- Improved ability to manage high volumes of cargo and the corresponding information
- Increased productivity and efficiency in all key operational aspects
- No application-related downtime since adopting Software AG applications in the late 1970s



Since 1996, Hong Kong has been the world's busiest air cargo hub. At Hong Kong International Airport, Hong Kong Air Cargo Terminals Limited (Hactl) garners more than 80 percent of the total air cargo business—thanks in large part to its long-term, ongoing investment in Software AG technology.

Get there faster.™

**“The ease-of-use of Software AG’s products is a **key business benefit** for us. Because we work in a rapidly-changing market, we must train our staff to use tools that can develop products as quickly as possible.”**

Andy Bien | General Manager of Information Services | Hactl

### Partnering for prosperity

In the fickle world of information technology, a vendor-user partnership spanning almost three decades is a rare commodity—but that’s exactly what Hong Kong Air Cargo Terminals Limited (Hactl) has enjoyed with Software AG. The relationship has proven prosperous for both, in particular propelling Hactl to its mantle as the world’s largest air cargo terminal in terms of tonnage. “Software AG is the type of company that is not full of hype, and as such it is very reliable,” remarks Bien. This reliability is critical for Hactl, whose infrastructure, logistics, and automation systems are among the most sophisticated in the industry. This is exemplified by the one billion dollar investment in SuperTerminal 1—a six-level state-of-the-art facility that provides an annual cargo capacity of 3.5 million tonnes. As Hong Kong evolves to become one the world’s most important international air cargo hubs and a major logistics gateway to China, Hactl plays a pivotal role—responding to extremely high-volume, quick-turnaround, and non-stop air cargo service demands.

### Leveraging technology strengths

There was a time when Hactl considered replacing core applications built on the Natural application development platform and running on the Adabas data management system on the mainframe. In 2002, the company created a strategic directive to explore alternative platforms based on client-server, object-oriented, and J2EE technologies, in hopes that such a shift would ensure future scalability. By the end of its evaluation, Hactl decided to retain those core applications because of “the high maintainability and reusability offered by Adabas and Natural,” explains Bien. Thus, the two critical systems supporting Hactl’s core business—the Community System for Air Cargo (COSAC) and the Logistics Control System (LCS)—are based on Adabas and Natural, running on IBM’s RS/6000 and

Sun Solaris machines. COSAC is an advanced system that drives all cargo handling operations in Hactl, linking airlines, freight forwarders, customer and excise departments, government authorities (Civil Aviation Department and the Airport Authorities), customs, shippers, and consignees with a common database. LCS is an automated, robotics-driven cargo handling system that coordinates more than 3,500 container storage positions and provides 10,000 box storage positions for bulk cargo awaiting import, export, and trans-shipment—from one central location.

### Managing growing data loads

As underpinnings to COSAC and LCS, Adabas and Natural face heavy database call and application processing loads; a high volume of cargo arrives with some 600 flights daily, many of which are Boeing 747s and other big-body aircrafts. Along with each consignment comes a huge amount of information that Hactl must handle quickly. According to Bien, “The data load invariably grows as consignment information gets amended several times throughout its lifecycle.” Additionally, the systems must accommodate last-minute data changes resulting from the cut-off time being “very, very close to the actual flight time, which is what you expect with Hong Kong—renowned for its very high efficiency.” Then there are the follow-up data chores; after planes take off, Hactl must amend consignment data and generate MIS functions to analyze the data. Closing the data loop is the company’s Web-based customer access portal, Hactl.com. Launched in 1994, Hactl.com is where Software AG’s webMethods EntireX comes into play. The integration platform connects front-end Web applications with Hactl’s back-end databases.

### Moving into an SOA paradigm

To be even more efficient in the next decade, Hactl has embarked on a Service-Oriented Architecture (SOA). As Bien puts it, “The way we see the future

is software componentization, which is the ability to reuse software components to enable new business services. Having a componentized framework will help us deliver these services quickly. I am happy to hear that SOA is a main focus for Software AG because that’s where we are going,” he says, adding that Hactl is interested in exploring Software AG’s webMethods suite and Natural Business Services. “What’s most appealing about Software AG’s message to us is its commitment to support the open standards and cross-platform environments,” states Bien; “This lets us easily accommodate other technologies in our diverse application infrastructure.”

### KEY COMPONENTS

#### Adabas and Natural

Provide, respectively, the application development and data management infrastructure for Hactl’s two key cargo handling systems: The Community System for Air Cargo (COSAC) and Logistics Control System (LCS).

#### webMethods EntireX

Integrates back-end systems with customer-facing and online business services.

### ABOUT SOFTWARE AG

Software AG is the world’s largest independent provider of Business Infrastructure Software. Our 4,000 global customers achieve measurable business results by modernizing and automating their IT systems and rapidly building new systems and processes to meet growing business demands.

Our industry-leading product portfolio includes best-in-class solutions for managing data, enabling service-oriented architecture, and improving business processes. By combining proven technology with industry expertise and best practices, our customers improve and differentiate their businesses – faster.

Software AG – Get There Faster

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