

DHL Express Sweden Web-Enables Mainframe Applications for Customer Self-Service

With Verastream Host Integrator, incremental steps are keys to success



DHL is the market leader for international shipping and logistics delivery, specializing in customized solutions from a single source. With a network connecting more than 120,000 destinations around the world, the DHL Express network operates land-based traffic, national and international transports, parcel distribution, and Air Express.

Uncertain Future for the Mainframe

DHL Express Sweden wanted to modernize their business processes and provide online self-service for customers. According to System Architect Peter Karlsson, the company is considering eventual “sunsetting” of their mainframes, so they were not willing to invest further in their legacy applications. Instead they set a goal of amplifying the legacy applications with reusable go-forward technologies.

DHL’s daily operations depend heavily on their established legacy systems, which contain information and business procedures built up organically from the 1970s through the present day. To fortify their legacy application investment, they needed an integration technology that could blend the best of the past and the present, with the flexibility to adapt to future business needs.

Helping Customers to Help Themselves

Karlsson said the ideal solution would be a simple tool that could make IBM mainframe-based timetables available online, for customers to see when their shipments would be picked up and delivered. This logistics-planning feature would require the publishing of selected host data and logic to key internal and external applications.

DHL also wanted to let customers get delivery rates on line. This price-quotation feature would require unlocking data and functionality residing on the company’s AS/400 application.

To meet the needs of customers and partners, DHL had been exporting data from their mainframe systems and replicating functionality for use in a web application. But this procedure, with its batch processing component, was largely unsatisfactory because of maintenance and synchronization problems. As a result, customers relied upon telephone calls, e-mails, and fax messages to get accurate information. It was an expensive process for customers and DHL alike.

Karlsson said that he was striving for a layered architecture where changes made on the back end would have the smallest possible impact on the other

QUICK VIEW

Problem

Needed to unlock legacy mainframe applications to provide customer self-service.

Solution

Used Verastream to create services from host functionality and build the web-based solution.

Results

- Customers can access timetables, get price quotations, and arrange transport bookings online.
- DHL self-service costs are one-tenth the cost of manual transactions.
- Staff is freed up to handle more targeted tasks.

layers. He decided it would be most effective to capture application interfaces and back-end functionality as web services. He also wanted to ensure that the mainframe complexity be hidden from the consumer of the services.

Transforming Legacy Apps Into SOA Assets

Because colleagues had told Karlsson, “Attachmate makes good, solid products,” he evaluated Attachmate® Verastream® Host Integrator and found it was just the solution he needed. Verastream Host Integrator encapsulates mainframe data and logic via the screen interface. It allows controlled use of legacy business processes and can make them available as web services, Java, or .NET components.

“A key Verastream advantage is its very efficient, straightforward modeling,” said Karlsson. “To create services with Verastream, we don’t have to go down into the mainframe programming. We just model the application, call on the procedure, and it all works.”

Verastream Host Integrator is easy to learn and fast to implement. “It took just a couple of months from learning, to understanding, to startup, to deployment,” Karlsson reported. Now, with the Verastream solution in place, customers can consult timetables and get price quotations on their own—without using phones or faxes—because Verastream is executing the complex tasks behind the scenes.

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System Architect
DHL Express Sweden

Reuse What You Already Have

DHL also wanted to offer online booking to customers. The company had tried a system that created EDI files to communicate between their back end systems and the web, but it was not user-friendly. For example, if a customer made a simple input mistake, the legacy system would completely reject the transaction. That meant customers were on their own to figure out the error, start again from scratch, and redo all the work to create another booking.

Karlsson and his IT team were already one step ahead of this problem, because they knew that Verastream-generated services can be isolated and reused to build composite applications. So they used the

services created for the timetable-lookup and price-quotation functions as part of the foundation for their booking solution.

The new process moves the actionable data directly to the back-end system, where it is merged with the existing functionality. “Now, customers can easily make all their transport arrangements online,” said Karlsson. “In addition to validating timelines and prices, this capability lets them actually initiate the process.”

Flexible Architecture Pays Off

The new functionality also opens DHL to more business. For example, small customers who don’t have EDI capability can use the same web interface as large customers who use standard EDI.

Karlsson said the solution is sure to provide rapid return on investment for DHL. In fact, he said that self-service bookings have already proved to be less than one-tenth the cost of manual e-mail, phone, and fax transactions. And although the solution is currently used for domestic land-based transports, it will soon be used to cover international services as well.

Now, with the service-oriented use of legacy applications up and running at DHL, development of additional features is also easier. Karlsson calls this “subfunctionality.” He gave the example of a new shortcut for validating postal codes. DHL will now be able to collect that data directly from the back-end system and cache it, instead of accessing it online for each transaction.

Tactical and Strategic Successes

Going forward, Karlsson said, DHL plans to use the same Verastream-generated services to broaden their booking solution, which is currently limited to customers who already have an account number. With the Verastream rapid-development platform in place, DHL will be able to easily offer new customers both existing and expanded functionality, including online credit card payments.

And DHL will continue to benefit from the incremental approach made possible by Verastream Host Integrator. “We need technology solutions that can be easily changed as new business problems arise,” Karlsson said. “For

example, next month DHL might say that we need the capability to handle x amount of data. What if that capability requires SNA to talk to the mainframe? We would not have to make a whole new IT investment, because we already have an interface we can connect to via Verastream.”

About Verastream Legacy Integration Solutions

The Attachmate Verastream product line comprises a complete range of mainframe and web modernization tools—from basic rejuvenation to customized presentation and sophisticated high-performance integration. Verastream-generated services can be mixed, matched, and reused selectively to extend legacy functionality to new users or new composite applications. No code changes to legacy applications are required, so you can avoid risk while speeding up application integration, application development, and workflow enhancement.

Another DHL Success With Verastream

See how Verastream Host Integrator helped DHL Belgium automate package sorting and reduce operational costs at <http://www.attachmate.com/CustomerStories/DHL.htm>

About Attachmate

Attachmate helps businesses extend, manage, and secure their IT investments. We offer a broad range of solutions—from terminal emulation, legacy integration, and PC lifecycle management products to innovative systems and security management tools. With our technology, more than 65,000 businesses worldwide are putting their IT assets to work in new and meaningful ways. Learn more at www.attachmate.com.



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