



## CUSTOMER CASE STUDY

### INDUSTRY

Transportation and Logistics

### GEOGRAPHY

Germany

### CHALLENGES

Provide multiple integration methods for communication with its diverse customer set. In addition to EDI and an ESB, DB Schenker was looking for delivery of web services through an API gateway that could ensure high availability and improved security at significantly reduced costs. It wanted the option for cloud delivery all in a solution from a trusted vendor.

### SOLUTION

Amplify API Management Platform

### RESULTS

- **Minimal cost** for developing, deploying, operating and maintaining the API interfaces and Web Services, for a lower total cost of ownership (TCO)
- **High availability and scalability**, enabling DB Schenker to meet its Platinum SLA, which guarantees 99.99% availability
- **Faster time to market** through a synchronous connection with customers, rapid onboarding of new customer connections, and swift development and deployment of gateway policies
- **Improved security**, through a secure front door for all of DB Schenker's Web Services, with full authentication capabilities and fine-tuned support for blocking service requests

# Moving freight faster, better, more securely

## How DB Schenker took logistics to new levels to meet customer demand

DB Schenker is the world's leading global logistics provider – it supports industry and trade in the global exchange of goods through land transport, worldwide air and ocean freight, contract logistics and supply chain management. More than 68,000 employees at some 2,000 locations around the globe generated revenues totaling 15.128 billion euros in 2016.

### Faster, better, and more secure

For DB Schenker, the logistics business is more than just moving freight worldwide. It's meeting customer demand for faster, better, more secure service. Today, an increasing number of customers want real-time, synchronous communications – quite a leap from batch-based EDI systems, the traditional workhorse of the logistics and transportation business. But DB Schenker is big. Very big. So it needed a solution that can scale up fast, while keeping costs down. A snapshot of the company's yearly activity gives a sense of the scope of the challenge:

- **Land transport.** 99.7 million shipments worldwide. (That's three shipments per second.)
- **Air freight.** 1.2 million tons transport volume. (That's the weight of 240,000 elephants.)
- **Contract logistics.** 8.0 million m<sup>2</sup> of storage area. (That's the size of 1,100 soccer fields.)
- **Ocean freight.** 2.00 million TEU transport volume. (That's the length of a row of containers stretching from Frankfurt to Hawaii.)

The company's EDI platform is similarly outsized: In 2016, it handled 600 million messages. (That's 50 million messages per month, or 2 million per day. Or more than 100,000 per hour. Or 50 per second.) Oh, and message volume is growing 25 percent per year.

That's the context. Now here's the task:

To maintain its competitive edge, DB Schenker wanted to provide fast, synchronous communications with customers, delivering Web Services over an API gateway that ensures high availability, airtight security and significantly reduced costs.

## A look at the DB Schenker landscape

To provide logistics services to customers, DB Schenker deploys three key components, each of which needs a secure front door for communicating with customers over the internet. These components are:

- **A classical EDI platform called SWORD<sup>1</sup>**, which connects customers with Schenker applications. Built entirely on Axway technology, SWORD handles all traditional EDI protocols and message types, but has no Web Services functionality.
- **An enterprise service bus (ESB)**, which connects DB Schenker's internal applications, but has no internet access
- **The eSchenker initiative**, which offers Web Services to customers, but requires an improved and standardized security mechanism

DB Schenker customers were actively driving demand for secure Web Services, as they wanted to:

- Use SWORD to exchange data with DB Schenker via Web Services
- Access the company's ESB-linked internal applications via customized Web Services
- Access eSchenker's Web Services via a standardized, highly secure API gateway

## Choosing Axway, a trusted vendor

In searching for an API gateway solution, DB Schenker studied six different alternatives, including several vendors and various environments (e.g., cloud-based, data-center-based, etc.). The criteria for selecting a solution were particularly rigorous, and included requirements for:

- **Minimal cost** for developing, deploying and maintaining Web Services interfaces, ensuring a lower TCO. A single, cost-effective solution would add needed functionality to the company's existing systems.
- **High availability** with failover, to enable DB Schenker to meet customer SLAs. Full functionality, with support for JSON, SOAP and REST APIs. Highly scalable, and expandable to cover the ESB at a later date.
- **Rapid time to market**, with fast development and deployment of new gateway policies, and rapid onboarding of customer connections.
- **Airtight security**, with authentication on username/password and on SSL client certificates, and support for blocking service requests under a wide range of conditions.

<sup>1</sup> Schenker Worldwide Realtime Data network

A good relationship with the vendor was also a key requirement. “We needed a vendor we could trust,” said Michael Scherner, head of Customer & Business Intelligence at DB Schenker. “We’ve worked with Axway for 18 years, and we know they’ll get the job done. We chose Amplify API Management Platform because the solution meets our technical requirements – and because we trust Axway.”

## Successful pilots, and a rapid rollout

The API management platform was swiftly rolled out following contract signature in December 2016. Development and test environments were set up in early 2017. Once all connections were established, the solution was tested through two pilot projects run with real customers in May-June 2017. The customers that participated in the pilots were:

- A leading clothing designer, manufacturer and retailer
- A major manufacturer of building tools for the construction industry

Following successful conclusion of the pilot, the Axway solution was planned for launch in fall 2017 with the goal to onboard an initial 10 to 15 connections with accelerated ramp-up thereafter.

## Meeting deadlines for time-critical processes, and meeting SLAs

The API management platform will be used to handle time-critical processes such as:

- **Precisely timed distribution of consumer products such as smartphones.** “The device has to be packed the right way in all warehouses, worldwide,” said Scherner. “Then, when the customer triggers delivery, we have to react instantly and ensure the packages go to the right stores.”
- **Just-in-time deliveries of automotive parts.** When a car manufacturer orders parts, delivery turnaround time is very short, and directions very precise. “If the customer says, ‘Deliver it tomorrow at 2:05 pm at plant 25, bench 7,’ we’ve just got to be there,” said Scherner.

Upon successful conclusion of the pilots, the Axway solution was to be launched in July 2017. The goal for Q3 was to onboard an initial 10 to 15 customer connections, with accelerated ramp-up thereafter.

## Speedy onboarding of customer connections – one of many benefits

Shortly before launching the Axway solution, DB Schenker already had a clear view of the benefits they expected, including:

- **Minimal cost.** “The cost factor was our highest priority,” said Scherner. With API Management, the company has a cost-effective solution that adds needed functionality to the company’s existing systems, while ensuring minimal costs, for a lower TCO.

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- **High availability.** Axway's cloud-based solution enables DB Schenker to meet its Platinum SLA, which guarantees 99.99% availability. The solution can scale as needed as new customer connections are onboarded. The solution provides full functionality, with support for JSON, SOAP and REST.
- **Faster time to market.** With a synchronous connection over the Amplify API Management Platform, customers receive a reply to their request in a single session, eliminating the need to phone in urgent orders. Onboarding of customer connections is significantly faster. "We estimate onboarding will take a matter of days, rather than weeks," said Scherner. Moreover, DB Schenker can rapidly deploy API Gateway policies and quickly respond to market demand.
- **Airtight security.** Amplify API Management Platform provides a secure front door for all of DB Schenker's Web Services, with authentication on username/password and on SSL client certificates, and support for blocking service requests under a wide range of conditions.

"With Amplify API Management Platform, we can serve our customers faster and better, with fully secure Web Services that provide the rapidity of synchronous communications and the high availability of the Axway cloud," said Scherner.

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Drive logistics costs down  
and scalability up with Axway →