



Mphasis

Datalytx

The Next Applied

Hermes Parcel Delivery: high volume Master Data Management

Talend and Datalytx expertise are helping this UK market-leading parcel delivery company adapt their business to offer more personalized services in the face of ever increasing competition in a growing, high volume market.



Client

Hermes, the consumer delivery specialist, provides flexible and affordable delivery options to home, work and a network of over 5,000 ParcelShops, delivering more than 335 million parcels a year.

Challenge

In no more than four months, build a real-time accurate database of records of senders, recipients and postal addresses, providing APIs for mobile apps and support for analysis of business performance and customer activity.

Solution

Talend Data Services Platform (delivering Enterprise Service Bus (ESB), APIs and Data Quality functionality), configured and commissioned using a six-strong team of Datalytx Talend professionals and deployed on scalable Amazon Web Services (AWS) Infrastructure.

Benefits

The data repository of people, addresses and parcel transactions is supporting delivery of exciting new mobile apps and providing deeper insight into customer behaviours. As a result, Hermes is more competitive, has improved customer service, and is reducing fraudulent claims for missing parcels.

Since 2009, UK parcel delivery company Hermes has steadily grown its business to become second only to the Royal Mail in delivery volumes. Up to two million parcels each day enter the Hermes network via home collections, ParcelShops (of which there are over 5,000) or from 80% of the UK's top high street, catalogue and online retailers, including Next, ASOS, John Lewis and Boohoo. These are sorted at one of Hermes' major hubs, and distributed for delivery from a network of over 60 depots using over 18,000 couriers.

"We're constantly striving to improve and extend our services to our customers (i.e. those sending parcels) as well as those who receive them" says Conroy Mallen, Architect at Hermes. "Our network is highly efficient and computerised. As our business has grown, so have our economies of scale. This means our customers are drawn to us by highly competitive rates for shipping goods. However, we don't want this to be the only reason they use us."

"Their willingness to work with us in the way we wanted, coupled with impressive architectural proposals for how to meet our exacting performance requirements, gave us the confidence we were looking for. This confidence has been borne out by their delivery." **Conroy Mallen, Architect, Hermes**

Challenges: Real-time Single View of the Customer

In a broad initiative called “Digital Futures”, Hermes sought to supplement knowledge of parcel movements with cleansed data about senders and recipients. Conroy and colleagues realised that a fundamental enabler for this would be to assess all parcel delivery instructions in real time, to create a totally accurate “Single View of the Customer”. Given a long-term strategy to integrate applications across the business, Hermes reviewed the market for ESB/EAI software, and selected Talend for its market-leading message-based integration, API development, and real-time data processing capabilities. “We also chose Talend for its comprehensive matching, database and business-user stewardship functionality,” says Mallen. Given Talend had already been chosen to provide point-to-point integrations for an enterprise Data Warehouse, the value Talend represented to Hermes made its value unbeatable, all the more so running on Amazon Web Services.

Why Datalytx?

Hermes asked Talend to recommend potential partners who could help establish a “Single View of the Customer” (SVoC) database, and they recommended long-standing partner Datalytx. SVoC would ingest parcel delivery instructions in real time (up to 1,000 records per second at peak times) and use data quality functions to check each one against data already stored. This would add or update, as required, records for people or address data. Two critical success factors stood out – firstly, the solution needed to be in place within 16 weeks in order to be ready to build the customer view during the Christmas busy period, and secondly – despite the high arrival rate of parcel records – no queue of records to process should exist for longer than 15 minutes.

Talend ESB and Datalytx Experience

Datalytx took Hermes requirements and, using expertise gained on previous Talend ESB deployments and high velocity IoT data solutions, offered to meet Hermes requirements. “Datalytx impressed us from the start,” says Mallen. “Their willingness to work with us in the way we wanted, coupled with impressive architectural proposals for how to meet our exacting performance requirements, gave us the confidence we were looking for. This confidence has been borne out by their delivery.” Using a team of six, and working both remotely and at

Hermes head office in the North of England, Datalytx set out to produce first high, and then low-level designs in the first four weeks. This was followed by four two-week sprints which built the core solution, a robust queuing service for feeding parcel data into the solution, and a range of some 16 APIs to both deposit and read data in a variety of ways. The scope additionally included synchronisation with Hermes’ CRM solution, and provision for data storage by new “Digital Futures” mobile device applications. Along the way, Hermes also benefitted from a Talend service which provided a Solution Architect – someone available, both on site and remotely, to help and support Hermes’ Talend initiatives.

Outcomes: Processing 1.5 million delivery instructions a day

“The SVoC solution we’ve delivered together – Hermes, Datalytx and Talend,” says Mallen, “is certainly now proving its worth. In the six weeks after Black Friday 2018, we amassed over 12 million party and parcel records. Incoming delivery instructions can be processed within 15 minutes, even when there are more than 1.5 million of these in a day – ample for now, with considerable room for growth. We’re now building apps to call APIs which return customer-oriented data such as parcels recently delivered to a given recipient, and a wealth of statistics around parcel delivery behaviours.”

Commenting on the deployment of the solution, Datalytx Account Director for Hermes, Peter Chase, noted: “Having developed the solution Hermes required, our team entered a complex acceptance testing and operational handover period. Datalytx now provide off-shore 24/7 monitoring and alerting, and our on-shore team work with Hermes’ own Talend data engineers to apply performance or functional changes to optimise the solution.”

“It certainly is proving to be a good partnership with the committed team at Datalytx,” comments Mallen. “And as a result we feel we’re getting great value from the Talend product set. Equally, AWS has been incredibly useful too, as we’ve worked to find the best deployment model for our needs.”

Going forward, comments Mallen, “the future is about integrating more applications and data to build on the great start we’ve achieved with SVoC. Given how well our partnership with Datalytx, Talend and AWS has worked so far, we can see us delivering broader benefits to our business as we build out truly comprehensive data integration and storage to support our digital future.”

About Datalytx

Datalytx is a leading provider of big data engineering, data analytics and cloud solutions, enabling faster, more effective and more profitable decision-making throughout your enterprise. Datalytx specialise in deployments of data driven solutions, and leading implementations into high performance data environments.

Together with industry leading partners – including Talend, Snowflake, Cloudera, Ephesoft, Tableau, Thoughtspot, Zoomdata, AWS and Microsoft Azure – we deliver high quality solutions to diverse clients across multiple sectors. Our proven design patterns for data pipelines, cloud data warehouses and Hadoop data lakes are powering real-time and batch data processing engines across an array of sectors.

Our customers benefit from the ability to ingest, curate, cleanse, integrate and enrich data from any data source or IoT device, at any scale and speed. Founded in 2008, privately owned, and with customers across EMEA and the US, Datalytx has become a specialist provider of choice for customers looking to successfully embark on, and realise the value from, modern real-time data architectures. Our clients include BetVictor, BOC, Calor Gas, Flybe, Hermes, iDirect, JD Sports and many more.



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