IBM[®] Aspera[®] for Retail Overview

Introduction

Customers today expect retailers to provide what they want, when they want it and how theywant it delivered. In response, retailers are investing in new technologies to deepen customer insights, enhance product assortments and provide seamless, engaging experiences across digital and brick-and-mortar channels. Many of these innovations are generating mountains of data or large digital files that need to be managed and moved across global networks.

Along with the exponential increase in data volumes is the geographic dispersion of retaillocations, collaborative teams and vendors, and business applications. Efficiently and securely moving growing data sets across global teams, stores and applications is a real challenge. Imagine distributing 20 gigabytes of video and product launch content to hundreds of retail locations, many of which have minimal network bandwidth, simultaneously within tight campaign launch windows. It's simply not possible using traditional file sharing and data transport tools such as FTP, Dropbox or incredibly cost-prohibitive with satellite distribution systems, resulting in increased costs and slow time-to-market.

As the creator of groundbreaking bulk data transport solutions and technologies, IBM Aspera® uniquely overcomes these challenges to securely and reliably distribute, sync and share data and files at the fastest speeds possible, anywhere in the world, across any network, regardless of file size or network conditions.

How Aspera has delivered value in retail:

- Aspera saved Best Buy over \$1M (USD) annually, replacing expensive satellite distribution systems for distributing promotional video and system software to hundreds of stores (internal reference only)
- Aspera enables The RealReal to launch products faster and scale their eCommerce business with fast, reliably sharing of 20,000+ images across global editorial teams each day (internal reference only)

The following are key examples of how Aspera solutions are used in the Manufacturing sector:

- Improve marketing collaboration with fast, secure large file sharing between global teams, vendors and stores
- Collect and orchestrate large volumes of data across complex store networks for business analytics
- Replace costly satellite distribution systems for sending rich media files to stores for digital experiences (such as video walls, displays, and more)
- Coordinate and perfectly time product launches with automated and predictable distribution of marketing files and brand assets to hundreds of stores
- Minimize downtime and exposure with easy and reliable distribution of large software updates to critical systems across store networks
- Accelerate product design with high-speed file sharing across global merchandising and product R&D teams
- Quickly and securely migrate massive volumes of data to cloud storage with no offline time or risk from shipping physical storage

Capabilities and benefits:

- Overcome Limited Store Bandwidth Fully utilize available bandwidth to move data tens to hundreds of times faster than TCP to any number of stores regardless of distance or network conditions
- Files of Any Size Reliably move and share many gigabytes of media files, brand assets and business data over any network at a fraction of the cost of satellite
- Flexible Deployment Support for on-premises, cloud and hybrid environments; desktop, web/SaaS and mobile clients available; and SDKs for integration with existing applications
- Bullet-Proof Security Robust data encryption, data integrity checks, authentication and secure proxy
 options ensure sensitive and regulated data is protected (such as product IP, credit card transactions,
 etc.)
- Real-time Reporting and Control Centralized transfer control, reporting and real-time bandwidth
 management prevents congestion on sensitive store networks and enables admins to optimize the
 transfer environment
- Automation Orchestration solutions enable fully automated transfer workflows across time zones, store locations and global teams

Company Profile

- Industry: Consumer products, Retail, Wholesale distribution and services
- Attributes: Includes retailers that are using costly satellite distribution systems, shipping hard drives or rely
 on FTP/TCP-based transfer technologies to sync, share, distribute large data and files to geographically
 dispersed teams and stores and to move large sets of data to/from the cloud. Legacy file transfer tools
 such as FTP are slow, insecure and unreliable for moving large files over long distance internet
 connections and limited store bandwidth, making it a challenge to manage and evolve the retail
 business.

Entry Points

- IT, Networking, Infrastructure, Storage: The types of problems they surface are –reducing CAPEX (such as satellite distribution is too costly, need to reduce/centralize datacenters), adopting new technologies (such as the cloud, collaboration and analyticalsoftware), migrating large data (such as to the cloud or new data center), improving network and application performance (such as how do I better move data to and from stores). Aspera can overcome the challenges of limited bandwidth and poor performing file transfer tools.
- Marketing: Marketing and content production teams face challenges distributing large media files, graphics, product images and digital brand assets to retail locations and instore digital displays and video walls, impeding product launches and marketing campaigns. Collaboration and reliable sharing of large media files across global teams and vendors is impacted by slow internet connections. Inability to easily distribute rich content to stores makes it hard to enrich store experiences and maintain brand consistency.
- VPs and Directors in LOB (such as Store Operations, Analytics, and more): Review reference use cases in the Conversation Guide. Each poses a unique challenge/pain point for the business.

Success Story Best Buy

- Business challenge: Best Buy needs to distribute large files (such as promotional video files for display on in-store TV's, software updates for crucial store systems, and customer support files for store tech teams) to its 1,000+ stores in N. America. Historically, leased satellite distribution systems, costing approximately \$100K (USD) per month, were used to manage these data transfers. With expenses growing, it needed a more cost-effective and easy-to-use solution for distributing files to stores on a regular basis.
- Business solution: After a successful pilot, Best Buy deployed Aspera High-Speed server software in their data center, Aspera Drive client on local store machines and embedded high-speed transfer capabilities into their existing digital asset management software with Aspera SDKs.
- Business outcome: Even in low bandwidth markets (less than 20 Mbps), Aspera made it possible for local teams to download the latest content over global networks at speeds comparable or faster than satellite, while reducing operating expenses by over \$1M (USD) annually. Aspera's software-based architecture and SDKs made it easy to launch on existing infrastructure and integrate with legacy digital asset management application, saving them from needing to purchase additional hardware.

Offering Description

• Solutions: Aspera offers a portfolio of software and cloud solutions built with its patented FASP® technology – a breakthrough transfer protocol that leverages existing network infrastructure and commodity hardware to achieve speeds that are up to 100s of times faster than TCP. With Aspera, retailers can securely and reliably distribute, share, sync and stream large files or data sets at maximum speed over global Internet connections, improving productivity, reducing risk and unlocking.

Competion

- Satellite Distribution Systems: Retailers frequently rely on satellite distribution systems to push large files and data to huge networks of geographically dispersed stores. These systems are extremely expensive and can require significant ramp-up time. Aspera's suite of software based solutions run on existing hardware using existing bandwidth to achieve accelerated transfer speeds, improved reliability and automated workflows at a fraction of the cost of satellite.
- FTP, Windows® File Sharing: These are common native or legacy file sharing technologies used by most retail organizations. All of these tools severely limit data transfer size or struggle, and in many cases fail completely, to move large data or files reliably over distance and across limited store bandwidth, or into the cloud. These tools require teams to spend hours compressing/splitting files, retransmitting failed transfers and monitoring transfer environments for issues. Aspera solves the issues created by these technologies.
- Cloud File Sharing: Cloud file sharing providers offer online, global file collaboration. These technologies rely on TCP-based transfers, so they are incapable of overcoming the fundamental performance issues that Aspera solves. Large file uploads/downloads using these cloud tools often experience severe reliability and transfer speed issues. These tools also fail to provide infrastructure flexibility, requiring use of their cloud storage. Aspera offers better performance and flexibility for any infrastructure including cloud.