ABInBev

At a glance

Industry

· Beverages / Food and drink

Products

- · IBM Aspera High-Speed Transfer Server
- · IBM Aspera Sync
- · IBM Aspera Console

Challenge

- Following a large-scale acquisition, AB InBev was tasked with finding a way to reliably and securely migrate a vast amount of data from multiple mission-critical systems in a very fast, cost-efficient and risk-free way.
- Traditional storage replication technologies were considered but not feasible as heterogeneous, incompatible storage systems were in play.

Solution

 AB InBev turned to the core Aspera transfer stack and Aspera's High-Speed Transfer Server to reduce the risks associated with large-scale data migrations and provide valuable time savings. The Aspera Console was also incorporated to provide visualizations and data insights.

Anheuser-Busch InBev

Providing a fast and reliable data migration platform for one of the world's biggest beer brewers

Anheuser-Busch InBev (AB InBev) is the world's largest brewing company and one of the fastest moving consumer packaged goods organizations. Headquartered in Belgium, AB InBev is a \$55B worldwide business, comprising a portfolio of nearly 500 global and regional beer brands across 100 countries. These include notable brands such as Stella Artois, Budweiser, Corona, Leffe, Beck's, Hoegaarden and Brahma, as well as multiple leading craft beers.

The company has transformed significantly over the last few years through a series of mergers and acquisitions, which have resulted in a sprawling estate of technology systems and tremendous amounts of data, all of which had to be integrated into AB InBev's existing infrastructure.

AB InBev was looking for an efficient and cost-effective way of migrating data into its information systems, and turned to the core Aspera transfer stack and Aspera's High-Speed Transfer Server. The technology has reduced the risks associated with large-scale data migrations and saved valuable time while eliminating complexity.

Challenge

Following the acquisition of SAB Miller in October 2016, AB InBev was faced with the complex challenge of how to integrate vast amounts of data from multiple data centers in various regions. Data center migrations always present a significant amount of complexity, raising questions around how to integrate different production environments in a minimal amount of time. There is also a risk that data can be lost or only partially transferred during the migration.

As its global lead enterprise architect, Manu Boudewyn was looking for solutions that would help AB InBev with its major data center consolidation and relocation activities, covering hundreds of business-critical applications and petabytes of data.

"Data center and cloud migrations typically bring a variety of challenges and their complexity is often underestimated," he says. "Besides the challenging network coexistence problems we typically encounter, technology architecture foundations are heterogeneous and both infrastructure and application service providers change during the migrations, which further amplifies the complexity."

Results

- The time it takes AB InBev to transfer 1TB of data internationally has decreased by 75%, dropping from 2.5 hours to less than half an hour on average.
- Performance is assured even under data-heavy circumstances, providing peace of mind that data will be reliably migrated in a minimal amount of time.
- Parallel sessions running simultaneously further reduce transfer time.
- Zero unplanned downtime helps ensure that important messages are broadcast at the right time.

Benefits

- Time and cost savings: With data migrations now taking a fraction of the time, AB InBev has saved valuable costs and freed up its staff to focus on other areas.
- Data quality: Reliable data transport minimizes the risk of rollbacks and project delays.
- Data-driven insights: Data analysis into the performance of data transfers enabled AB InBev to quickly identify any sub-optimal configurations and optimize the process in real-time.
- Platform for growth: From an architecture perspective, AB InBev has identified multiple additional opportunities for using Aspera software that can help it scale its data processing activities in the future.

In support of its industrialized and proven migration methodology, AB InBev required a strong solution for all of its tier 1 applications that could provide a sustainable, high-speed connection between data centers without causing business disruption, even when 15+ network devices from a variety of infrastructure providers are in the data path simultaneously supporting critical business transactions.

"In digital transformation, every second matters and business outages – especially for global companies – can be incredibly painful. Because of these challenges, we've always been architecting to ensure maximal business continuity, irrespective of the circumstances," added Boudewyn.

Solution

To reduce the complexity involved in data migration and ease the burden on staff, AB InBev deployed elements from the robust and scalable Aspera transfer stack, giving staff access to a solution that guarantees performance irrespective of transfer distance, file size or volume, and network conditions.

Aspera High-Speed Transfer Server enabled AB InBev to transfer an unlimited number of files of any size concurrently, while server administrators had access to a powerful set of management features – such as the ability to adjust bandwidth targets and configure granular access control settings – throughout the migration process.

Furthermore, Aspera Sync provided high-performing and scalable file replication and synchronization while business operations remained online, enabling AB InBev to scale its processes up and out for maximum performance over wide area networks. This software helped the company deal with an extremely high number of small (unstructured) objects, while also using the same technology for shipping big Oracle datafile stores.

AB InBev also incorporated the Aspera Console for full visibility into its transfer environment, providing visualizations of data usage and valuable insights into the performance of individual data transfers. Console enabled AB InBev to pinpoint peaks and troughs in speed and assist with troubleshooting by identifying any sub-optimal configurations in order to optimize the process. Finally, it also helped AB InBev plan its migrations more accurately.

"Both in Latin America and Europe we've been successful in using IBM Aspera, even for non-traditional use cases," says Boudewyn. "I've studied Aspera's high-speed data transfer technology and adaptive secure transfer protocol in detail for overcoming the limitations of the TCP protocol for some time. I've also been following the product's evolution closely over the past few years — even before the IBM acquisition back in 2014. The technology, along with the company's heritage of working with international media and broadcasting companies and other time-critical content providers, were key factors.

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Manu Boudewyn,
Global Lead Enterprise Architect,
AB InBev

"Aspera has provided us with some great architecture capabilities – most notably their adaptive rate controller and unique high-speed FASP protocol which have proved to be key enablers to helping us accelerate big data movements whenever time is of the essence."

Results

AB InBev has transformed the way it migrates large quantities of data, using the Aspera stack to minimize time and risk. Before deploying Aspera technology, it typically took 2.5 hours for AB InBev to transfer a 1TB environment and data was frequently only partially transferred, or there were other issues around data quality. With Aspera, 1TB took less than half an hour to transfer in their recent use case, equating to approximately 75% in time savings on average – with the added benefit of significantly reducing risk and ensuring delivery.

Working with AIX operating systems, following some careful customization and fine-tuning, AB InBev has been able to transfer hundreds of SAP and non-SAP business applications all within the shortest amount of time. For example, they reliably transferred up to 75TB concurrently during their peak migration windows in just 29 hours (quality assurance inclusive). In heavy usage, they have achieved transfer speeds up to 6.9Gbps, accommodating other network traffic running on its 10 Gbps network.

"Along the path we still faced various challenges while transferring millions of files over a seven-month period. Working over weekends to ensure minimum downtime, with only a 24-hour maximum outage window, Aspera's committed product management team was integral in helping us isolate any issues as we moved along our challenging journey. We're looking forward to teaming up with Aspera again in the near future whenever petabytes are in play."

Case study

For more information

On IBM Cloud solutions, please visit us at https://www.ibm.com/cloud.



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