

# Provider of payment processing secures sensitive data while reducing operational costs, achieving SLAs and enabling business growth

## Background

Our customer is a leading provider of payment processing strategies and advanced technology solutions for business and financial institutions. At the core of the company's business is financial data processing that enables merchants to accept and process credit, debit and prepaid payments and financial institutions to offer payment processing solutions.

## Business Goals

The company's business goals for this project focused on aligning with requirements for secure data storage and exchange with customers like CVS, Target®, Office Depot® and Discover® Financial, without introducing inefficiencies that would negatively impact those existing business relationships. There was also a requirement to meet customer Service Level Agreements (SLAs). The company wanted to shorten time to market and speed invoicing with new customers and be in a position to accommodate future revenue growth and expansion of the business through acquisition.

## Challenges

**Security Risks of a Complex Partner Network:** The company needs to securely transfer data to over 40,000 merchant locations and 1,300 financial institutions. The company uses x.509 digital certificates to secure sensitive data; however they service customers who use differing security formats, such as OpenPGP and ZIP, which results in security gaps. Data security compliance requirements mandate file level encryption for the transfer of Personally Identifiable Information (PII). In 2011, the company was flagged for PCI DSS noncompliance due to an analytics database passing unencrypted PII between platforms prior to importing it into a SQL database. Because the application contains seven million lines of code, becoming compliant would be a daunting task that could take months to achieve. The company needed a solution for security and compliance.

**Risk of Missing SLAs:** The company's customers have established strict SLAs where missing data processing windows results in harsh financial penalties. Lines of business within the company were incurring significant charge backs to utilize the mainframe engine for secure file transfer. In order to maintain response times for interactive users during the day, the company needs to maintain a system utilization of 45% or less. The impact of complying with the PCI DSS regulations was significant. Testing revealed that using IBM® Encryption Facility (EF) would push the CPU utilization rate to 90%-100%. As a result, system response time would suffer. What's more, the encryption overhead increased processing time

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and data size, putting the data batch processing SLAs at risk. Contractual penalties for missed SLAs would quickly erode profit margins, creating conflict between the data security and data center operational teams. Because the company has a high volume of interactive, daytime transactions, it would require six additional mainframe processors to maintain its current online user response time service levels. The resulting cost would be a \$6.6 million investment in additional processor capacity. They needed an alternative to purchasing new hardware.

**Complex Customer On-boarding:** Invoicing on new contracts cannot begin until the customer signs off on implementation, meaning the company can't recognize revenue until on-boarding is complete. Each day results in lost revenue. On-boarding new customers was a costly process that took four weeks and required two dedicated people to establish common, secure connections. On boarding each customer required custom programming to accommodate the unique environments of each platform and the process was not repeatable. Existing software contracts required additional fees for each new connection. The company needed a solution to simplify and speed up the on-boarding process.

**Future Growth Hindered by the Data Center:** The company recently gained independence from a much larger corporate entity and is poised for growth through acquisition. However its data center is not provisioned for expansion. Incorporating the data from the acquired companies would be an integration nightmare. They needed a solution to quickly and securely transfer data.

**Limited Revenue Streams:** Stakeholders demand revenue growth, putting pressure on all lines of business to find new revenue streams through new offerings, value-added services and enhanced service levels to customers and prospects. The company needed a way to easily expand lines of business with new customers and gain competitive advantage.

## PKWARE Satisfies the Need

**Secure Data Exchange with Customers and Partners:** The company is now able to do business with customers regardless of security format or computing platform. Using SecureZIP PartnerLink, the company now aligns with its customers' requirements to secure data using encryption that supports Windows® (Desktop and Server), Power and mainframe computing environments using passphrase, digital certificates and OpenPGP keys. With PKWARE, PII is now passed securely from the z/OS® platform directly to the SQL database, eliminating transfer to additional platforms and removing possible points of security risk and noncompliance. *Sensitive data is secure while in motion and at rest, and compliance is achieved.*

**Reduced Costs:** In addition to securing data, PKWARE also provided the ability to create new processing efficiencies allowing the company to maintain response times and to meet customer

SLAs. As part of the procurement process for SecureZIP, a benchmark analysis was performed, measuring the transfer time for files of various sizes using SecureZIP versus EF. The analysis revealed exceptional results – when using IBM EF, elapsed time was six times longer and CPU utilization was 14 times higher than when using SecureZIP for encryption. By using SecureZIP for z/OS, the company was able to avoid the \$6.6 Million investment in additional processor capacity which it would have needed to maintain its system utilization. The company's business units were able to reallocate financial resources and maximize response time. *Penalties associated with SLAs have disappeared.*

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**Streamlined and Efficient On-boarding:** With PKWARE, the company now brings its customers on board in days using a repeatable process that is platform independent and requires only one person to execute. Because of the cross platform capabilities of SecureZIP, custom programming and additional on-boarding processes are eliminated. SecureZIP PartnerLink allows the company to cut future partner-based licensing expenses and drop the average implementation time for a new customer from one month with two employee resources to less than a week with one person. *On-boarding new customers is no longer a barrier to revenue generation.*

**Ready for Growth:** The company is poised for future revenue and acquisition growth because it can quickly integrate new entities into its system. The company now has a solution that complements its merger and acquisition planning process by providing a single, interoperable way to secure confidential information associated with all communication methods (email, disk, tape, FTP). *Data procured from future acquisitions will be efficiently and securely transferred from one data center to another.*

**Competitive Advantage:** The SecureZIP PartnerLink licensing model is viewed as a value-add. The company COO believes that employing the PKWARE solution and methodology enables them to be fastest to market – *a significant competitive advantage!*

## Vendor Consolidation – An Added Benefit

As part of a cohesive enterprise strategy centered on data reduction and security, the company consolidated three vendors to one, eliminating the need for WinZip®, Vormetric®, and PGP. They also significantly reduced their use of Data Domain®. They had been using Vormetric for encryption and Data Domain appliances for data consolidation and de-duplication in an effort to save time and DASD; that strategy cost over \$150,000 each year to acquire new appliances. By implementing SecureZIP PartnerLink for Server (Windows and AIX) to reduce and secure data at rest in their storage subsystems, the company was able to refrain from utilizing full disk encryption. This resulted in significant savings since full disk encryption costs on a single storage system are over \$100,000. Additionally, the company can now defer purchasing additional tier three and tier four storage, saving \$150,000 annually. They also avoided the purchase of IBM EF for encryption on the mainframe. The company calculated that the consolidation to the interoperable, multi-platform *PKWARE solution will result in over \$3 Million in savings compared to continuing to deploy point solutions.*

**ABOUT PKWARE:** PKWARE, the industry leader in enterprise data security products, has a history rooted in innovation, starting with the creation of the .ZIP file in 1986. Since then, PKWARE has been at the forefront of creating products for reducing and protecting data — from Mainframes and zLinux to servers to desktops and into virtual and cloud environments.



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