

GEOBRIDGE Corporation Cryptographic Key Management Simplified

Cryptography is nothing new, especially when it comes to the payment industry, which is willfully behind more federal, state, and international standards for general data protection. But what really makes payment cryptography different and more challenging when compared with general purpose cryptography is the fact that in the general encryption space, data is encrypted so that nobody can access it and it remains where it needs to be. Payment data, however, is something where encryption keys need to be shared and it has to be done in a way that it compromises neither the data nor the key. Having arrived early in the scene as one of the first information security solutions providers, GEOBRIDGE Corporation is a company that was established on the cornerstones of this understanding about the payment industry. “GEOBRIDGE is a unique company with a main focus on supporting cryptographic key management, primarily in the payment card space,” asserts Jason Way, the CTO of GEOBRIDGE Corporation. But, they certainly don’t limit themselves to payment card initiatives, where they support cryptography and payment applications for payment processors, financial institutions, and retail organizations.



As a leading encryption and key management system integrator, GEOBRIDGE provides Payment Security and Cryptography and Key Management, along with Compliance and HSM Virtualization solutions and services. Through its flagship product—the KeyBRIDGE platform—the company aims to simplify and automate the overall discipline of cryptographic key management. KeyBRIDGE enhances, tracks, audits, and verifies all types of data and allows for better key lifecycle management. As every transaction process is for a limited timeframe, the key should have a crypto period and a rotation capability. To that end, GEOBRIDGE provides the KeyBRIDGE Point of Interaction (POI) platform—a vendor-agnostic solution—that supports and performs key injection for any key for payment terminals and peripheral devices. “We started out in 1997 by supporting 5-10 devices throughout North America; today the same technology is utilized to assist well over 350

different models of devices with 40 plus POS manufacturers and distributed through key injection facilities across the globe,” explains Way.

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GEOBRIDGE started providing KeyBRIDGE Remote Key Delivery (RKD) to reduce the high costs and operational delays associated with shipping devices to physical Key Injection Facilities (KIF) and receiving new cryptographic keys. KeyBRIDGE RKD improves the overall efficiency of the processes. GEOBRIDGE also extended its vendor-agnostic approach to key distribution with payment devices, to enable any valid endpoint to interface with KeyBRIDGE through KeyBRIDGE eKMS. Whether it’s overall generation, import, or distribution of various key types, eKMS can handle them all. They also introduced the TokenBRIDGE License on the KeyBRIDGE Platform to protect PII.

The company has always been a pro-solution provider when it comes to keeping up with the pace of the ever-changing encryption requirements for enterprises. For providing on-demand key services for HSMS and key management alongside a centralized key management utility, GEOBRIDGE introduced its Key Exchange and Escrow Services (KEES). With the help of a group of experienced and professional key custodians, KEES support enterprises with all aspects of the key management lifecycle for key generation, which includes key distribution, key rotation, key escrow, and compliance scope reduction.

Whether it’s Key Management Program Development, Payments Industry Consulting, Cryptographic Software Development Warehouse Services, Cryptographic Solution Architecture or HSM Virtualization, the broad spectrum of GEOBRIDGE’s services makes it a go-to provider for a vast global client base in retail, financial services, healthcare, manufacturing, and government markets. For the future, GEOBRIDGE’s focus is on expanding its reach to more customers by exploring newer markets and consumer initiatives through virtualized techniques and cloud-based offerings. **ES**