

GEOBRIDGE Professional Services



GEOBRIDGE is committed to providing white glove key management support services while working with customers around the globe to provide exceptional technical support for all of our products and services. Numerous support options are available to ensure the success of all GEOBRIDGE customers.

Professional Services Team

The GEOBRIDGE Professional Services team holds decades of hands-on experience in network security, architecture and implementation. Our specialties include Enterprise Cryptographic Architecture, Payment Card Security and Compliance, Cryptographic Key Management and Procedure/Policy Publication and Enablement. Among the only Systems Integrators dedicated to the implementation of cryptographic solutions, our team is trained and certified to implement and support a wide range of market leading solutions. Our professional services team members are adept technology leaders who know how to apply efficient and effective project management methodologies allowing GEOBRIDGE to provide unparalleled value for our clients. Our clients are comprised of the fully payment lifecycle spectrum:

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- Equipment
 Manufacturers
- Card Issuers
- Transaction Acquirers
- Service Providers
- · Merchants of all sizes



Professional Services Offered at GEOBRIDGE

Cryptographic Development

GEOBRIDGE has designed, developed, and deployed firmware, APIs and documentation to financial service customers and manufacturers around the world. GEOBRIDGE's Development team supports HSMs including Thales, Safenet, Atalla and UTIMACO.

Our developers are able to provide analysis, design and implementation of highly complex cryptographic key management solutions. Our development solution experience includes both standards based and customized cryptographic deployments.

In addition, GEOBRIDGE offers cryptographic development services to manufacturers for the compliant implementation of cryptographic functions that are required to support card based transaction ervices. Today, our team supports over 300 POI devices.

Technical Expertise in Architecture, Design and Implementation

GEOBRIDGE staff combines decades of in-house experience in cryptography and active involvement in the payments industry and standards bodies. Providing expert insight and guidance in architecting and implementing cryptographic and key management solutions that include:

- RESTful APIs
- Host Applications
- Vendor Proprietary APIs
- Virtualized Services
- P2P Implementations
- Assessments, Strategy, Design and Delivery
- Tokenization Solutions

for global organizations.

Our financial services expertise combined with a depth and breadth of technical knowledge, means we can deliver solutions in an agile approach

Compliance and Program Development

GEOBRIDGE provides program development, design and documentation for policy and procedure requirements that satisfy mandates for PCI PIN Security and Key Management Programs, Network Operations, Incident Response Plans, and Corporate Security Policies to align with industry compliance requirements and best practices.

GEOBRIDGE has worked with multiple organizations to develop and implement Key Management programs specifically addressing these critical elements:

- Secure Room Policies
- Oversight & Monitoring Requirements
- Uniform Document Procedures
- Governance Parameters
- · Personnel Guidelines
- Equipment Inventory Procedures
- Cryptographic Keying Material Procedures
- Key Exchange Procedures
- Access to Cryptographic Keying Materials Logs
- Performance Management Goals
- Customized Program documentation
- Final Program
 Participant Training

Documentation Expertise

GEOBRIDGE has seasoned certified assessors who are adept in writing our customers documentation of policies and procedures that must be maintained, allowing for future updates, and evaluated for audit purposes, GEOBRIDGE ensures that documentation will seamlessly map to the required mandates allowing for quicker and more successful audit cycles.

As we maintain a voting presence and technical editing service to organizations like the Accredited Standards Committee X9, GEOBRIDGE resources remain knowledgeable, effective, and ahead of the curve to support our clients for the purposes of maintaining compliance and program documentation.

Documentation deliverables include:

 Comprehensive User Manuals

Key Management

- Development Release Notes
- Quick Start Guides
- PED Wiring Diagrams
- · Quick Start Guides
- PED Wiring Diagrams

Policies and Procedures

Outstanding Customer Service

GEOBRIDGE customers are our most vital asset, and so we believe Support begins from initial implementation and continues with ongoing maintenance of a solution. The GEOBRIDGE team provides white glove support while working with customers around the globe to provide exceptional technical support for all of our products and services.

Numerous support options are available to ensure the success of all GEOBRIDGE customers:

- Standard Support:
 Monday Friday
 (8am EST 6 pm EST)
- Premium Support: 24 x 7 x 365 days a year
- Onsite implementation and training
- Extended Hardware Warranty
- RMA Services

Skilled Project Management

GEOBRIDGE is very aware of the PCI mandates and requirements that are driving cryptographic changes in the payments industry. Our top priority is to execute all milestones by coordinating with all participating business units in order to bring each project to a successful conclusion. By facilitating weekly project meetings, establishing a disciplined approach with ongoing communication and collaboration with the customer, the GEOBRIDGE Project Manager creates a project plan that aligns with Executive Management expectations.

Strategic projects include:

- TR-31 Key Bundling Migration
- HSM Firmware upgrades
- Key Injection Facility Installation
- GDPR Tokenization
- Migration off of Legacy injection solutions
- Variant to AES LMK translation

Key Exchange and Escrow Services (KEES™)

GEOBRIDGE realizes that organizations struggle with having full-time dedicated staff to manage all their aspects of their in-house key management. The KEES services is a PCI PIN compliance service that offers the experience of on-staff Key Managers and Key Custodians who help provide staff augmentation by performing many of the encryption requirements needed on a day to day.

Services available are:

 Enabling Remote Access to Hardware:

The KEES platform extends a simple JSON schema RESTful API for remote access to a dedicated client's protected key store. Connections are supported over TLS 1.2. From there, the KEES platform translates the inbound RESTful API to many different proprietary APIs for CryptoServer and Atalla HSM including other HSM manufacturers Thales, Safenet.

 Key Block Translation: The KEES platform can translate keys under Variant LMK to a new Key Block LMK.

Back-Up and Archive Storage:

The KEES platform performs real-time backs of KeyBRIDGE and archives the backs for DR purposes.

Mass Key Generation and Distribution:

The KEES fully trained on staff Custodial team generates and distributes keying materials in compliance with PCI PIN Security.

 Key Inventory Escrow: The KEES platform securely wraps keys under an AES key to meet PCI PIN requirements for storage of keys using TR-31 Key Block format.

• **Key Inventory Rotation:**The KEES platform
is capable of rotating
the key inventory from
encryption under the old

LMK to encryption of the key inventory under the new LMK.

Remote Key Loading:
 The KEES platform uses remote JSON Schema RESTful API commands in order to distribute remote key payloads to designated targets.

 Virtual HSM Technology:

The KEES platform has the ability to perform the following:

- HSM Firmware Updates
- HSM License Updates
- HSM Configuration Management
 - · Authorization Settings
 - · Security Settings
 - · Alarm Settings
 - · Host Settings
- HSM Master Key Loading
- HSM Key Rotation
- Internet of Things



In 1997, GEOBRIDGE emerged as one of the first information security solutions providers to support cryptography and payment applications for payment processors, financial institutions and retail organizations. Guided by the credo that information security solutions should support, rather than dictate, business requirements, GEOBRIDGE continues to find new mechanisms that leverage our customers' security measures to better meet their business needs. Today, GEOBRIDGE is a leading information security solutions and compliance provider that supports a diverse global client base in retail, financial services, manufacturing and key injection facilities.

GEOBRIDGE brings together a team of highly skilled and highly experienced Network Security Architects, Application Developers, Cryptographic Key Management Experts and Project Management professionals who are fully invested in satisfying the security and compliance requirements of our customers.

Contact

GEOBRIDGE Corporation

20110 Ashbrook Place, Suite #125, Ashburn, Virginia 20147

+1 571.799.0145

Sales@geobridge.net

For more information about GEOBRIDGE products, please visit:

geobridge.net