Encrypting and Manipulating Data
Encrypted data is a step in the right direction to securing cardholder data. Magensa Decrypt and Forward Gateway allows ISOs and VARs to create secure, smarter data packages for transaction environments. Magensa Decrypt and Forward Gateway Services allow systems integrators and developers to support encrypted data in their payment application without third-party service providers supporting a decryption service. The terminal supplies the application programming interface (APIs) coupled with the encrypted data creating a smarter data package.

Magensa has functions to handle pattern matching and conditional processing, and is smart enough, following rule sets, to look at data and determine what to do with the data and how many endpoints need the data; allowing for routing manipulation that is unmatched in the industry. Our API allows your end points to be HTTP, XML, Internet, TCP, TLS, raw Byte stream, VPN and more. Anything our readers can read, via magnetic stripe, EMV chip, NFC, can be encrypted and secured. Anything our readers can encrypt, we can secure, with a variety of functions to manipulate the encrypted data.

Sending Data for You
Magensa Decrypt and Forward is smarter than your average gateway, since it allows for data manipulation with a variety of functions. It works with legacy platforms and old interfaces. Encrypted data is sent from the POS or central host along with the API block to Magensa for decryption. Magensa decrypts the data and keeps the API with the appropriate data set. Data is put into the format the processor needs, and can also learn sets of rules to send various data to various processors, or third party service providers.

Security is our Top Priority
MagTek’s MagneSafe® Security Architecture is built into MagTek secure card reader authenticators and PIN PEDs. These devices deliver instant encryption inside the hardware. This places only encrypted data into your environment and secures your data. Magensa utilizes open standard and industry proven Triple DES encryption and DUKPT (derived unique key per transaction) key management to provide a comprehensive security solution that protects cardholder data.
Benefits of Decrypt and Forward

Magensa Decrypt and Forward Services allow system integrators to couple data and API blocks together, and manipulate decrypted data without ever having to actually see the data. Magensa works with any third-party that allows Magensa to call on behalf of the user.

- Works by decrypting data from a MagneSafe encrypted card swipe and placing the appropriate decrypted data into the target XML or key-value pairs.
- Does not rely on a pre-existing integration between Magensa and the third-party service provider.
- Has the ability to send a “batch” of requests in a single call to the service.

Magensa Decrypt and Forward delivers the secure and smart manipulation of sending encrypted data.

Use Case

The Challenge

In order to keep up with PCI regulations, a retailer needed to start accepting and taking encrypted cardholder data. Being a long standing retailer, their systems were very out of date and could not handle encrypted card data.

The Solution

Using MagTek secure card reader authenticators they were able to instantly encrypt the cardholder data at the first point of interaction. The data could then be packed, parsed and sent through their payment environment disguised as unencrypted data.

The Result

This customer is able to meet and exceed current PCI DSS requirements, while still using their existing infrastructure. Their PCI audit was successful and their payment environment secured.

Recommended for

Magensa Decrypt and Forward Gateway Services are recommended for big merchant organizations that process transactions and have a development team ready; and resellers or ISOs that work with merchants and are ready to determine the necessary data and customizable XML command sets required.

Web Services

Magensa Global MagnePrint® Exchange (card authentication), Magensa Device Authentication, and Tokenization are included with this service at no additional charge.

1. Card Reader/POS app
   Sends encrypted data

2. POS app/Magensa
   POS app/Host send encrypted data and API block to Magensa

3. Magensa
   Magensa decrypts, bundles with APIs and sends out for processing or other transaction types.

4. Processor/other
   Processor/other sends response back to Magensa

5. Magensa/POS app/Host
   Magensa returns response and card auth & device auth

Magensa offers a wide range of innovative tools and transaction processing services for authentication, cryptographic security, and privatization of sensitive data. Magensa’s encryption/decryption services, payment gateway services, tokenization services, remote services, and applications are used by software developers, ISVs and systems integrators to bring their applications to market faster and more securely. Magensa’s services and solutions are trusted by commercial, retail, financial and government enterprises without compromise. Magensa, LLC is a subsidiary of MagTek, Inc.