

Epic Lanka Relies on Thales to Secure Keys for Payment Channel Encryption

Epic Lanka provides leading e-security and e-payment solutions to corporations in Sri Lanka and neighboring regions. Established in 1998, Epic Lanka develops and implements innovative solutions in such areas as secure electronic payments, information systems security, mobile enterprise automation, and secure document personalization.

Customer need

Among its many services, Epic Lanka supports the largest network of online real-time payment processes in the country. The communication channels associated with this network handle the transmission of such vital data as card numbers, expiration dates, card verification value codes, and so on. If criminals gain access to these communications, they could leverage this data to create so-called “ghost credit cards” and commit fraud.

Previously, the communications between point-of-sale (POS) terminals and host servers in the data center were happening in clear text, which was posing a couple key challenges. First, Epic Lanka’s banking customers were concerned about transaction security and the potential exposure of financial information and credentials. Second, Epic Lanka was finding that its ability to expand POS deployments into remote areas was being hindered due to these vulnerabilities.

Challenge

In order to secure the transmission of sensitive financial data, Epic Lanka needed to implement encryption as well as robust, scalable key management.

Solution

Thales ProtectServer HSM offers the capabilities that enable Epic Lanka to securely store keys, and it offers the dedicated cryptographic processing that speeds transaction times.

Benefit

By leveraging ProtectServer HSM in its TLE solution, Epic Lanka has been able to deliver highly secure and scalable encryption services, while at the same time minimizing the time and cost associated with encryption deployment and administration.



To realize point-to-point security for the financial data traveling between POSs and data centers, Epic Lanka needed a mechanism for generating and securing the keys associated with the solution’s cryptographic activities. Given the vital nature of these keys and the data they are tasked with protecting, it was vital that these cryptographic assets were secured in the most rigorous fashion at all times.

In addition, the implementation of a line encryption solution was mandated by the Central Bank of Sri Lanka, in part based on advice given by the National Payment Council. To help its banking customers secure this line of communication and address this mandate, Epic Lanka developed Terminal Line Encryption (TLE). By encrypting these communication channels, Epic Lanka provides a critical safeguard for sensitive credit card information.





“We won’t consider ourselves successful until credit card fraud in Sri Lanka is significantly reduced and eliminated completely. With Thales, we can ensure our encryption keys—and ultimately our customer’s transactions—are secure. This has helped us build trust with our banking customers and ultimately reduce payment fraud.”

– Viraj Mudalige, Director/CEO, Epic Lanka Group

The solution

Epic Lanka’s TLE solution is a comprehensive channel encryption offering that provides a secured communication path between POS machines and hosts at acquiring banks. The TLE solution is integrated with ProtectServer Hardware Security Module (HSM). ProtectServer HSM provides secure storage of keys, and it offers a dedicated cryptographic processor that speeds transactions.

With ProtectServer HSM, Epic Lanka can manage the encryption and decryption of financial messages in a secure, tamper-resistant environment. ProtectServer HSM helps Epic Lanka ensure that key generation, Personal Identification Number (PIN) translation, and application processing are very secure and compliant with Payment Card Industry Data Security Standards (PCI DSS).

Before selecting ProtectServer HSM, the operations team conducted an extensive review of the HSM solutions on the market. After a review of the alternatives, the decision makers at Epic Lanka found that Thales and its solutions offered an unparalleled combination of cost efficiency, ease of use, and quality support.

Solution benefits

By leveraging ProtectServer HSM in its TLE solution, Epic Lanka has been able to realize a range of benefits:

- **Robust security.** To be successful, Epic Lanka and its customers need the Epic TLE to provide maximum security of critical transactions and communications. Through its secure key storage, ProtectServer HSM supports Epic Lanka in delivering highly secure encryption services, which helps the company establish and build customer trust.
- **High scalability.** Through its high-speed cryptographic processing, ProtectServer HSM helps ensure the TLE solution scales to meet customer demands and service level requirements. Epic TLE has been successfully implemented in five banks, and supports upwards of 200,000 transactions every day.
- **Profitability.** ProtectServer HSM is a cost effective solution that enabled Epic Lanka to deliver its solution, while making minimal up front investments. Further given its ease of use, ProtectServer HSM required minimal time and effort to set up and maintain. Consequently, ProtectServer HSM supports the delivery of Epic Lanka’s vital TLE offering while helping preserve the company’s margins.

About Thales

The people you rely on to protect your privacy rely on Thales to protect their data. When it comes to data security, organizations are faced with an increasing number of decisive moments. Whether the moment is building an encryption strategy, moving to the cloud, or meeting compliance mandates, you can rely on Thales to secure your digital transformation.

Decisive technology for decisive moments.