



SOLUTION BRIEF

Business Correspondent (BC) Solution from Tapits

Solution: Micro ATM Services at BC point

Business Challenges

As the need for developing products targeted towards the rural or unbanked regions had increased to multi-fold, Fingpay (a brand under Tapits Technologies Pvt Ltd), by using their own Micro-ATM services intended to help the rural people to uplift them with banking access and financial services and bring the rural community in the mainstream.

There was utmost need of taking the cash withdrawal services to Tier 3 to Tier 6 localities but due to the infrastructure difficulties in rural areas coupled with regulatory compliance to maintain the high level of security while performing financial transactions, there were many challenges. Fingpay looked at a hardened, tamper-resistant hardware devices to provide high levels of protection for cryptographic keys and handle customer PINs securely during the transactions which can be integrated with their micro-ATM application and selected Thales payShield 10K HSM to provide cryptographic support and PIN generation and management. As Thales payShield HSM has necessary certifications as mandated by regulatory compliance including PCI DSS and DPSC Audit and is already deployed at many Banks for handling card / ATM transactions, Fingpay integrated its application with Thales payShield HSM and provided complete micro-ATM solution to their end customers.

The Micro ATM Solution

Fingpay Micro ATM solution provides ATM services to customers at ease by visiting a BC point. In this entire solution various components are involved like MPOS device, payShield HSM from Thales, Software application, Fingpay SDK, Fingpay server, Bank switches etc. Fingpay services the demands of cash withdrawals using debit cards by providing Micro ATM terminals and software at BC points. Features of the solution includes generating the keys, card data encryption, PIN block translation during the network switching of transactions thus performing the end-to-end transactions securely.

Thales payShield HSM is used at various stages within in the solution for below mentioned use cases.

- **Key management** - Generating the keys loaded into the MPOS devices and storing the keys.
- **Key schemes** - Generating the keys using DUKPT and Working keys.
- **Card data and PIN block encryption** - Card data is secured by encrypting it using the HSM generated keys and KSNs
- **Configure PIN block translation keys** – PIN block translation keys are securely configured in the Thales payShield HSM.
- **Card data and PIN block translation**- Application is integrated with Thales payShield HSM to translate the PIN block and card data.

Solution Key Features and Benefits

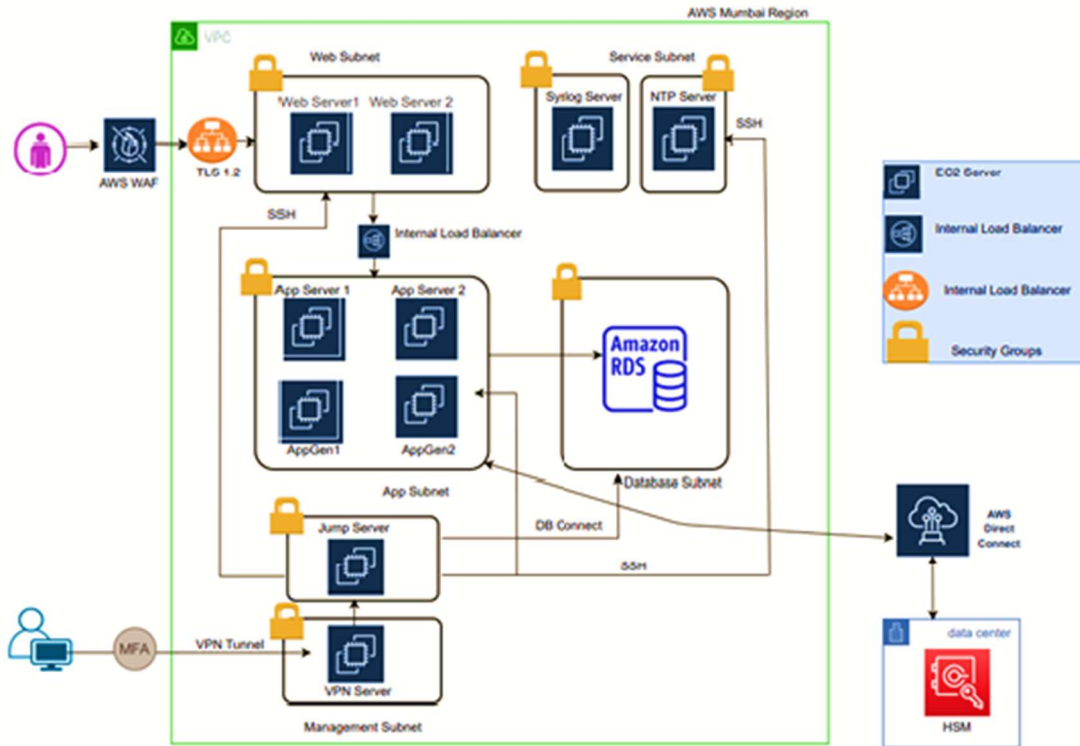
- Simple yet secured solution to perform Micro ATM transaction
- Allows customers to uplift themselves with Micro ATM access
- Fulfills the high demand of ATM by providing Micro ATM terminals at BC points





- Security of card data was taken care of by using Thales payShield 10K HSM
- PIN block translation during the transaction was handled securely

Illustrative graphical diagram



About Tapits Technologies

Fingpay is a brand under Tapits Technologies Pvt. Ltd. backed by investments from ICICI Bank and Ivy cap Ventures. It was incorporated in 2016 with a vision to bring Financial and Digital inclusion through technology built around the India Stack. Since then, Fingpay has grown its network to over 10,00,000 Merchants and 30+ Corporates, offering a complete suite of Payment and Onboarding products, such as, AEPS, Cash Management, BBPS, IMPS, BHIM Aadhaar Pay, UPI, Micro ATM and QR. Fingpay has partnered with multiple Banks as a corporate Business Correspondent (BC) and as a Master Merchant, thereby creating a resilient back-end infrastructure.

The need for developing simple yet powerful products targeted towards the underserved and unbanked, triggered the inception of the company. With the advent of the solution, Fingpay is successful in helping the rural people to uplift themselves with additional income generation, banking access, credit access, digital payments and many other financial services. To further this cause, Fingpay is developing a Super APP Platform for the rural / semi urban population that will enable them to seamlessly interact with various financial products and services.