



Electronic Payment and Services Private Limited
Solution Brief Document

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EFT Switching Platform

Electronic Payment and Services Private Limited (EPS) has provided banks a crucial link between multiple customer touch points and back-office systems, enabling them to provide multiple self-service channels and value-added services. Our EFT Switch Solution and services seamlessly integrates a bank's network with NPCI's National Financial Switch (NFS) ATM network, UPI, IMPS, NETC (Fastag) etc., improving interoperability and reach of services across the financial sector, while lowering operating costs.

The Switching Solutions provided by EPS manages direct integrations with Banks to their end-point terminals as well as the National Payment System. It supports and manages routing of authorization requests to major national and international networks and card acceptance channels: ATMs, POS terminals, Internet and mobile devices. It enables dependable, complex transaction processing through a fully integrated, end-to-end solution that covers the full range of services needed to complete the transaction lifecycle.

Benefits

- Leverage EPS' services and solution capabilities to easily integrate ATMs or POS device terminals to the network with minimal downtime. Manage terminal and merchant data with a web-based data management tool.
- Dramatically improve bank's payment-processing efficiency. Reduce cost of ownership
- Acquire, process, clear and settle the credit and debit card payment transactions from any touch point across any network in real time.
- Improve reliability with real-time authorizations.
- Support new modes of transactions such as remittances, bill payments, service recharges etc. over mobile, internet, wallets and other channels that enhance customer experience.
- Benefit from EPS' solution and services portfolio in EJ Pulling and Content Management Services, monitoring and audit trails, integration with banks e-surveillance systems and so on, which add value to the EFT Switch solution.
- Support Value-Added Services such as insurance premium payment, health premium payment, immediate payments etc.
- Enable flexible amount load, point addition etc. as a part of authorization or individual transaction, based on card loyalty or prepaid service developed by the bank.
- Supports following interchanges: MasterCard, VISA and NPCI RuPay.
- The solution complies with all requirements of MasterCard, VISA, RuPay, NPCI or any other payment processor.

Business Requirement

- Need to securely store and manage sensitive cryptographic material, protecting it from unauthorized access and theft.

Many banks do not have the in-house capabilities and expertise to manage their Technology infrastructure. As the third-party Technology Service Providers (TSP), EPS provides the cost-effective switching services; Often, the Banks prefer to avail these switching services from the TSPs as Software as a Service (SaaS) model. But the key element to any payment transaction processing is the strength of its security features which determines the reliability of the process.

Hardware Security Module (HSM)

The Hardware Security Module (HSM) from Thales plays a vital role in providing the end-to-end secure transaction processing in the EPS's EFT Switching Platform. Thales payShield HSM is used by EPS as a highly secure solution for managing digital keys and protecting sensitive data.

Following were some of the benefits that we got by using Thales payShield HSM device.

Benefits	Description
Enhanced Security	Thales HSM device provides strong cryptographic security for financial transactions, protecting sensitive data from theft, tampering, or unauthorised access. This had assisted EPS in ensuring that transactions are kept secure and also met the industry standards.
Efficient Key Management	Centralized key management services simplified key generation, storage, and distribution, thus improving the efficiency of EPS operations. This had reduced the errors and improved transaction-processing times.
Regulatory Compliance	Secure key management and encryption services helped us to meet regulatory requirements such as PCI-DSS. This helped EPS reduce the risk of non-compliance penalties and reputational damage.
Scalability	As Thales HSM device can scale to support large volumes of cryptographic operations, this feature made it suitable for EPS to handle the high-traffic applications.
Flexibility	Thales HSM device can be deployed in a variety of environments, including cloud-based applications and on-premises data centres, thus providing flexibility for EPS to manage the keys across multiple locations.

EFT Switching Platform

The EFT Switching platform from EPS is a Java-based architecture offering a highly configurable environment to the ever- changing needs of a business. It is EMV-Compliant, PA-DSS validated and PCI-DSS Software compliant. It enables dependable, complex transaction processing through a fully integrated, end-to-end solution that covers the full range of services needed to complete the transaction lifecycle.

Features

The key functional capabilities are as below:

- Terminal (ATM / POS) driving
- Channels integration, schemes and network connectivity
- Transaction handling
- Transaction authorization and Stand-in authorisation
- Routing of transactions to other systems, schemes, networks
- System monitoring
- Terminal monitoring
- Debit / Prepaid Cards management
- The platform has a modern open design written in 100% Java code using object-oriented design techniques for ease of development and maintenance.

Benefits



Delivers 24/7 reliability demanded for real time, online transaction processing by offering 99.99% uptime.



Supports all existing and emerging payment channels – ATMs, POS, E-Commerce, Mobile.

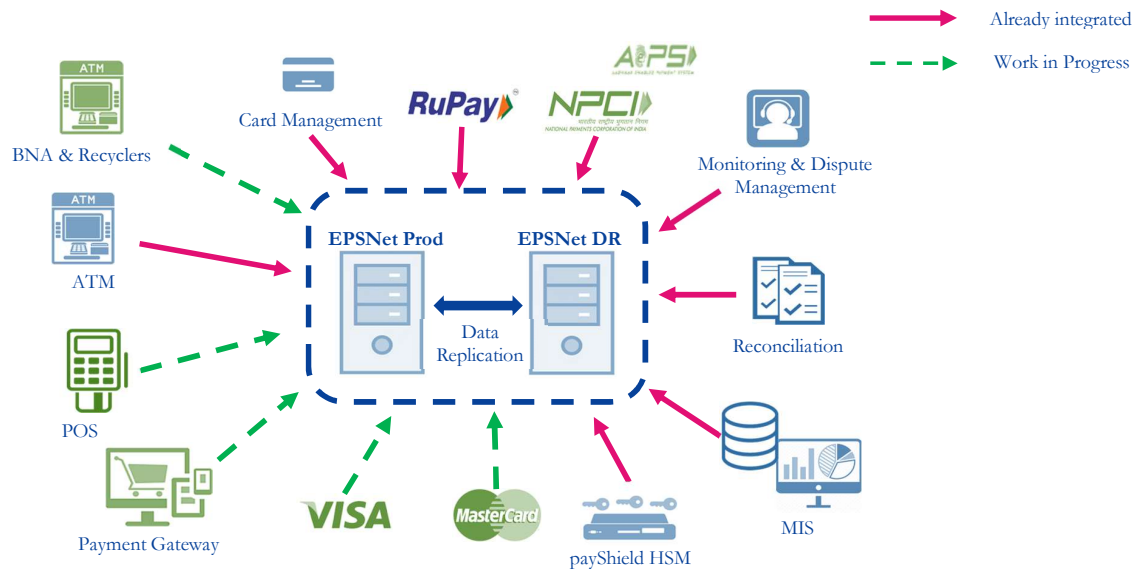


Java-based architecture offers a highly configurable environment to the ever-changing needs of a business. EMV-Compliant, PADSS validated and PCI-DSS Software compliant.



Easily integrates with FRM and fully protects inflight transactions

EFT Switching External Architecture



Summary

More and more Banks and financial institutions prefer outsourcing their technology infrastructure to third party TSPs. EPS's EFT platform with the end-to-end secure transaction, assured by Thales payShield HSM offers a more reliable and affordable solution in the market.

About EPS

EPS is a payment technology services company providing cross-channel, full-spectrum technology solutions across the payments value chain. EPS was incorporated on 29th September, 2011 with a profound vision of emerging as a leading provider of technology solutions in the retail banking and payments system with the aim to bridge the gap in demand for efficient, secure and technology-driven products and services for the banking industry. Over a decade, EPS has developed as a payment technology services company that provides cross-channel, full-spectrum technology solutions across the payments value chain. EPS is backed by prolific investors from financial services and payments space; and also having eminent Board of Directors and Advisors.

ATM Industry Pioneer

A pioneer of ATM outsourcing in India, EPS today manages around 12,000 ATMs across PAN-India for 11 Banks. EPS handles over 336 Mn transactions and services 224 Mn customers on its ATMs every year across the length and breadth of the country. In order to support the Ministry of Finance (Govt. of India) led mission driving 'Financial Inclusion', EPS was the fastest and one of the first to successfully deploy over 5,000 ATMs in urban and rural locations under the Ministry Of finance (MoF) project during 2012-14 providing reliable and dependable services.

EPS offers ATM services with flexible engagement models such as Brown-Labelled ATM Services, and Managed Services. It is one of the market leaders in end-to-end Automated Teller Machine (ATM) Operations & Outsourcing Services, and ATM Managed Services. EPS manages



end-to-end ATM Operations, 24x7 ATM Managed Services Centre, Transaction Processing Services, Card Management Services, and Outsourcing Services. Under ATM outsourcing, EPS offers end-to-end ATM management from site identification, ATM deployment, site management, ATM monitoring, cash forecasting and replenishment, helpdesk and incident management, ATM maintenance, reconciliation, switching and transaction processing.

Expanding Portfolio of Payment Solutions

EPS provides cross-channel, full-spectrum technology solutions across the digital payments value chain and has handled over 3.4 Bn digital transactions in the last one year.

EPS enables Banks and Non-Banking Institutions embark on a Payments Transformation journey by streamlining payment processing, avoiding financial slippages due to deficient reconciliation, reducing risks due to ever increasing fraud, sophistication and improving customer centricity. It's portfolio of solutions includes Payment Card Life Cycle Management, EFT Switch, Fraud Risk Management, Enterprise Reconciliation and Exception Management, Mobile Banking, Internet Banking, and transaction switching for mobile-based instant payment mechanisms such as UPI, IMPS, NETC, NEFT, RTGS, ATM, POS, E-COM, AePS etc. cards management services for debit cards and prepaid cards and other payment solutions to banks and other financial institutions. EPS is an approved Application Service Provider (ASP) with NPCI for its payment channel.

EPS provides PCI-DSS certified Transaction Switching Solution, which can drive all industry standard front-end payment devices. It has achieved certification of EPS Switch (EPSNet) on NPCI's Rupay interface for ATM shared network, infrastructure services for ATM deployment and monitoring, transaction switching and processing, interchange gateway for Electronic Journal management.



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