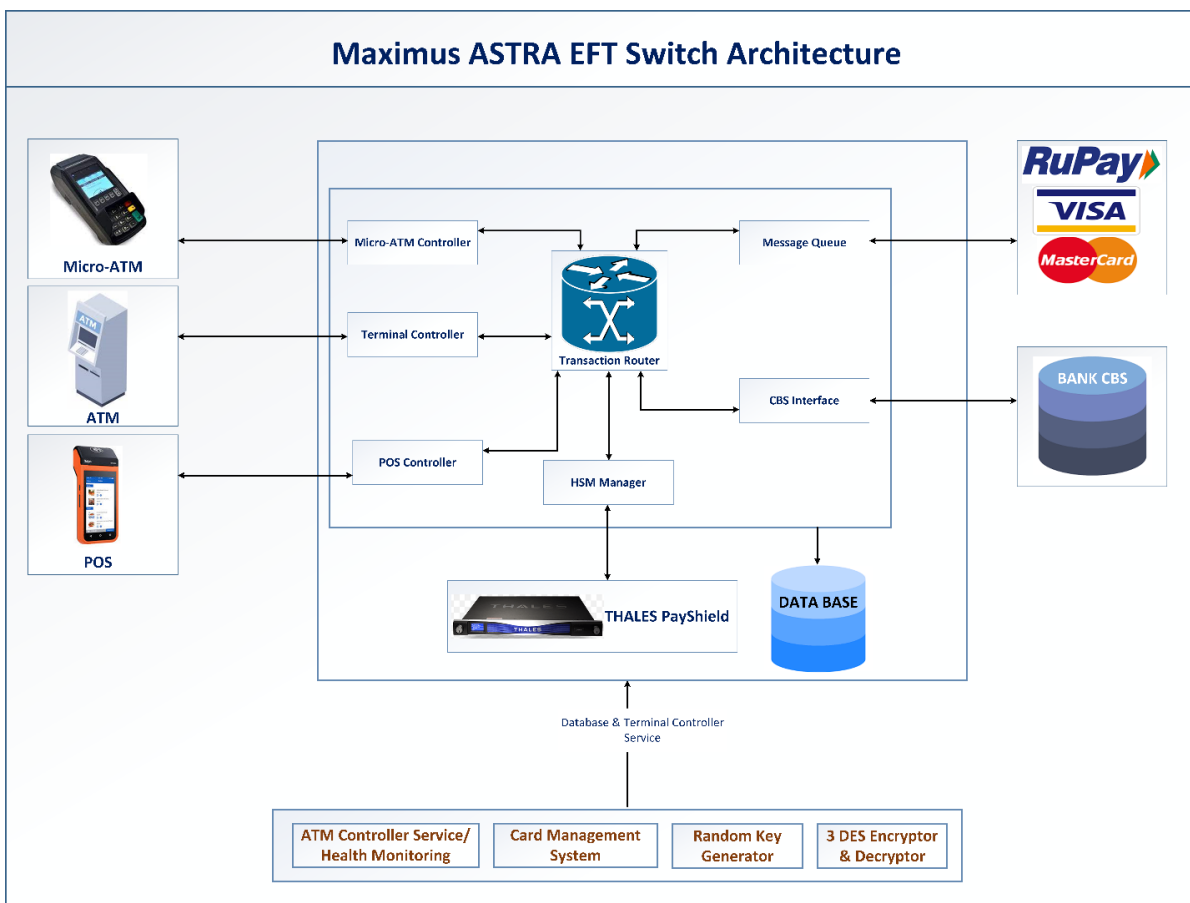


MAXIMUS SOLUTION BRIEF

Introduction

Maximus is one of the leading software service providers in the payment domain, it provides various services ranging from card management for all major global card network schemes to EFT switching, whether it is debit card, credit, prepaid card, UPI, IMPS, other digital payment services and transit ticketing. For all the payment processing it is imperative that a Hardware Security Module (HSM) is used for PIN verification, PIN translation or Key Management. To meet this requirement, the Maximus solution is integrated with the Thales HSM for different use cases.

ASTRA EFT Switch



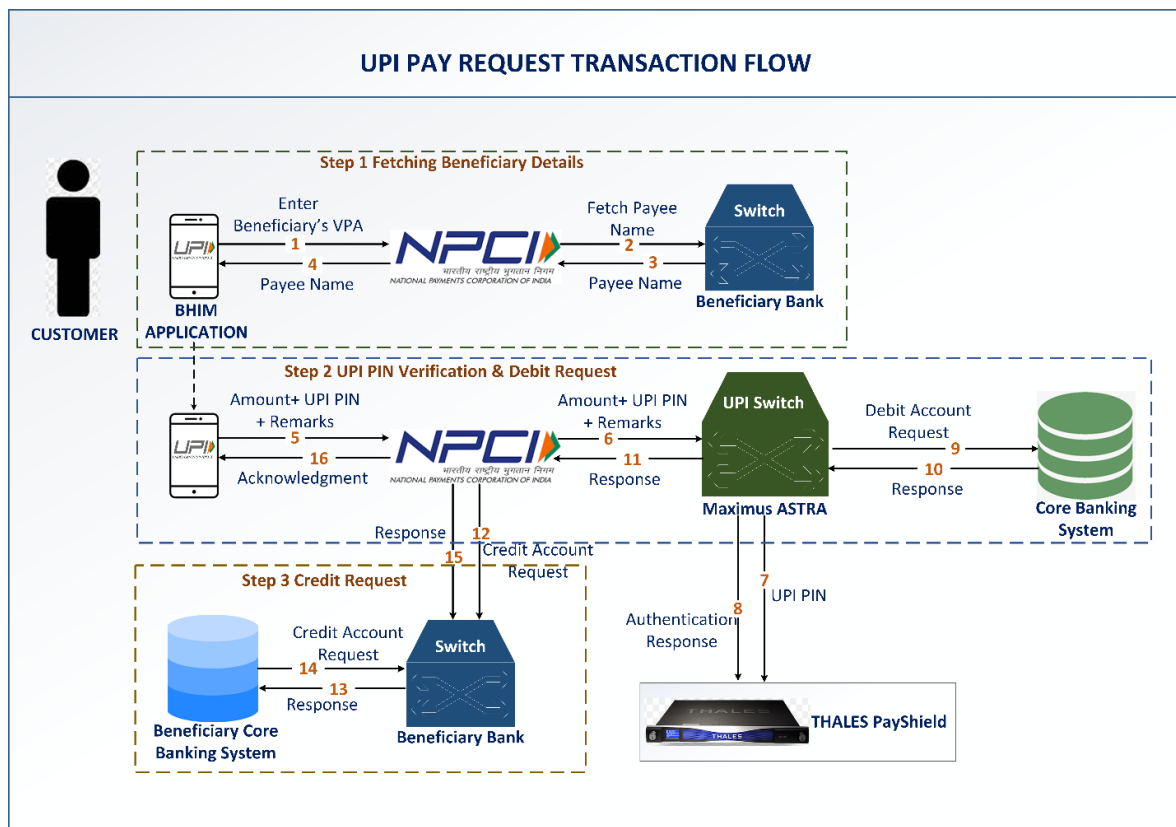
ASTRA is a high-end EFT Switch built on scalable technology architecture to support ATM, POS and online channels. This is PA-DSS certified application and is scalable at hardware level to support a large number of channel devices. It is flexible by design and therefore, can be customized and/or enhanced easily. Its modular architecture supports integration with external systems without difficulty. ASTRA supports interfaces with different Thales Luna EFT HSM modules and can be connected to multiple

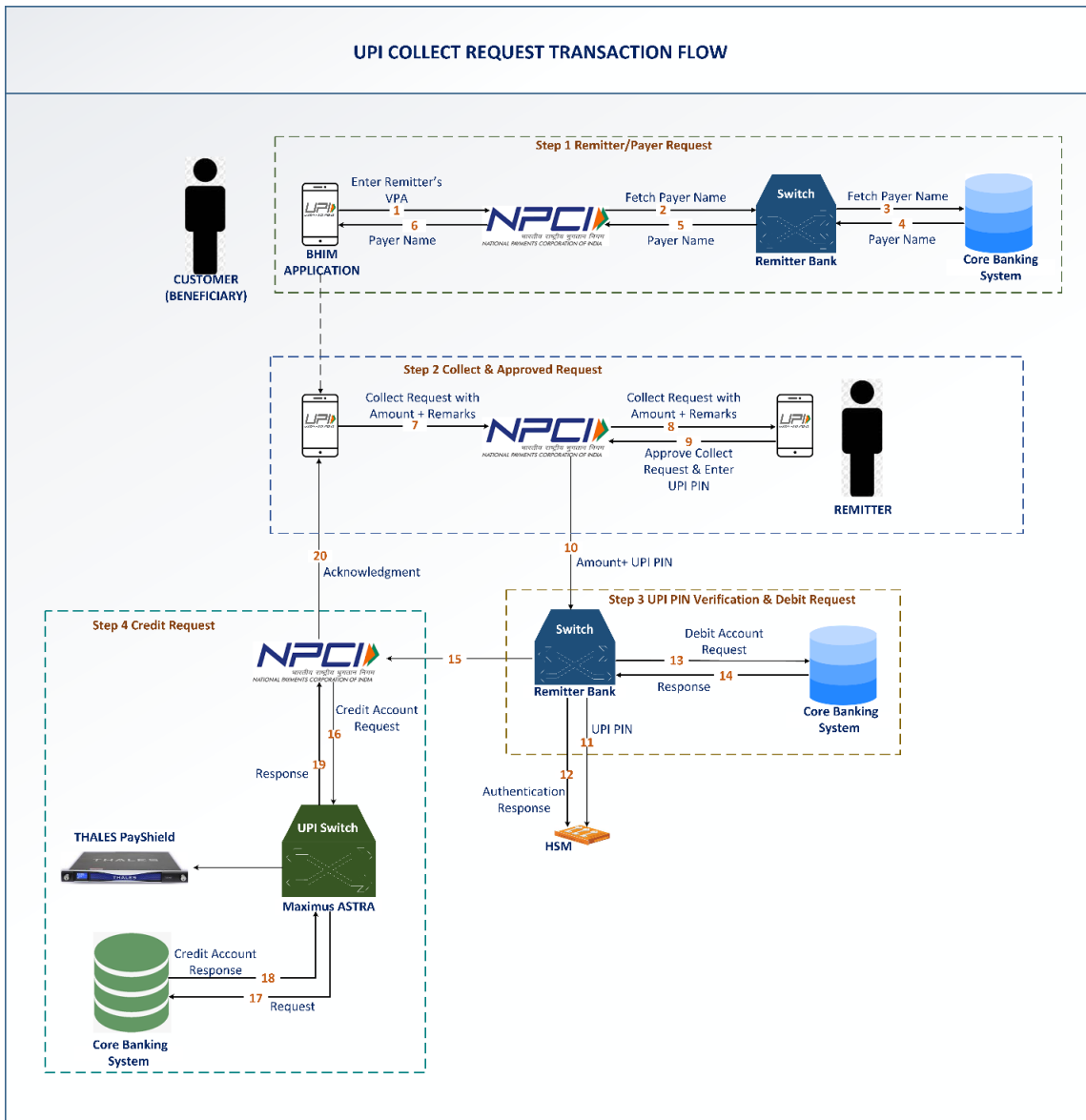


payment networks like RuPay, Visa and Mastercard. It communicates seamlessly with any NDC or DDC compatible ATMs. ASTRA has inbuilt ATM management tool, to allow ATM terminals to be managed online or remotely, upload currency cassette configuration and requisite critical parameters from a remote machine. ASTRA acts as a terminal controller cum communication gateway to connect customers using the channels to the bank's host. On-us, Issuer and off-us transactions, are identified by ASTRA and routed to the appropriate destination system. ASTRA has rich suite of real-time alerts, MIS reports, Informative dashboards to provide better insights.

Maximus also offers EFT Switching as a Managed Services offering from its state-of-the-art, PCI-DSS certified, Tier III Data Centre having full BCP capabilities. Maximus provides the EFT Switch solutions/services on hosted model as well as license model.

MULTI – Unified Payment Interface



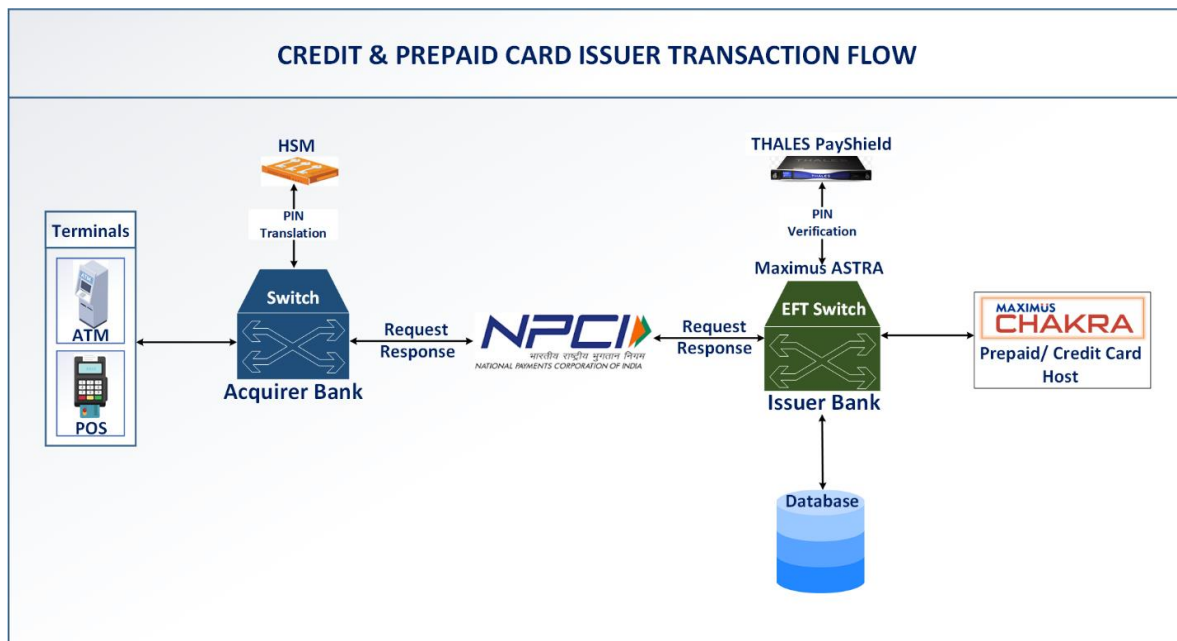


MULTI the futuristic implementation of NPCI's Unified Payment Interface (UPI), ensures safe, efficient, interoperable, authorized, and accessible payment and settlement systems in the country that are inclusive and compliant with international standards. MULTI is designed to fulfill the objectives set out by RBI and NPCI to create less-cash society and Online Immediate Payment System (IMPS) using mobile technology and internet. It provides scalable architecture with appropriate Application Programming Interfaces (APIs). The MULTI mobile application allows secured payment from account using virtual addresses through credentials and provides full traceability of the transaction. The solution is already integrated with Thales General Purpose (GP) HSM to support two-party, three-party and four-party transactions in a fully secured manner.

CARDE – Card Lifecycle Management

CARDE is a complete lifecycle management solution for any type of cards. Available in centralized as well as decentralized versions, the solution makes it possible for banks and card issuers to deal with the entire lifecycle of their credit, debit and prepaid cards. The system can also be used for issuance and management of loyalty cards, gift cards and reward cards. The card data generation and PIN mailer printing activities are carried out in a PCI-DSS certified environment. CARDE is normally bundled along with ASTRA, the EFT Switch to provide an end-to-end solution.

CHAKRA – Credit Card Management System



CHAKRA is Credit Card Lifecycle Management that includes Customer Registration, Documents Verification, TDSR Calculation, Credit History Check, Card Limit Approval & Billing Process and reports. The solution can issue credit cards based on customer credit history and other parameters, documentation, KYC of customers etc. handle the authorization of transactions and handle the bill payments. A highly parameterized product, where bank's team themselves can change the parameters to meet their requirements. Both CARDE and CHAKRA are completely integrated with Thales HSMs for Card issuance activities, PIN generation and validation activities, PIN printing etc. as required by the lifecycle on the issuer side.

Requirement

For payment security, Hardware Security Module (HSM) is an important part of the whole solution. Thales and Maximus jointly provide the solution for payment channels whether it through EMV cards, IMPS, UPI or any digital payment channels through our above products/solutions. Customers are

required to comply with regulatory guidelines for securing the payments initiated by end customers on different payment channels.

The solution

Maximus offers a comprehensive switching solution, “Maximus ASTRA” catering to the processing of different payment channels integrated with Thales HSM for UPI, IMPS, ATM/Recycler and other digital channels.

The ASTRA Switch can connect terminals (ATMs / Recyclers / Mobile Banking Applications / POS Terminals / Micro ATMs), NPCI / VISA / MASTER, Payment Aggregators, other Payment Switches and the Core Banking Applications. It provides real time view of the transactions, cash in ATMs /Recycler and provides dashboard for key information and the health status of the terminal components.

Solution benefits

Maximus ASTRA and CARDE solutions offer a one-stop solution for Card Issuance and Transaction Processing and the front-end portal for all dashboards, reports, configuration and providing interfaces for capturing the master data. Integrated with the Thales HSM ensures the PIN and data security, privacy, confidentiality and availability of the information as per the access rights assigned to the roles. Role is assigned to all the users of the system. The ASTRA Switch on a hosted model operates from a PCI-DSS certified environment, and follows all the regulatory guidelines of countries where the solution is hosted.

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.
