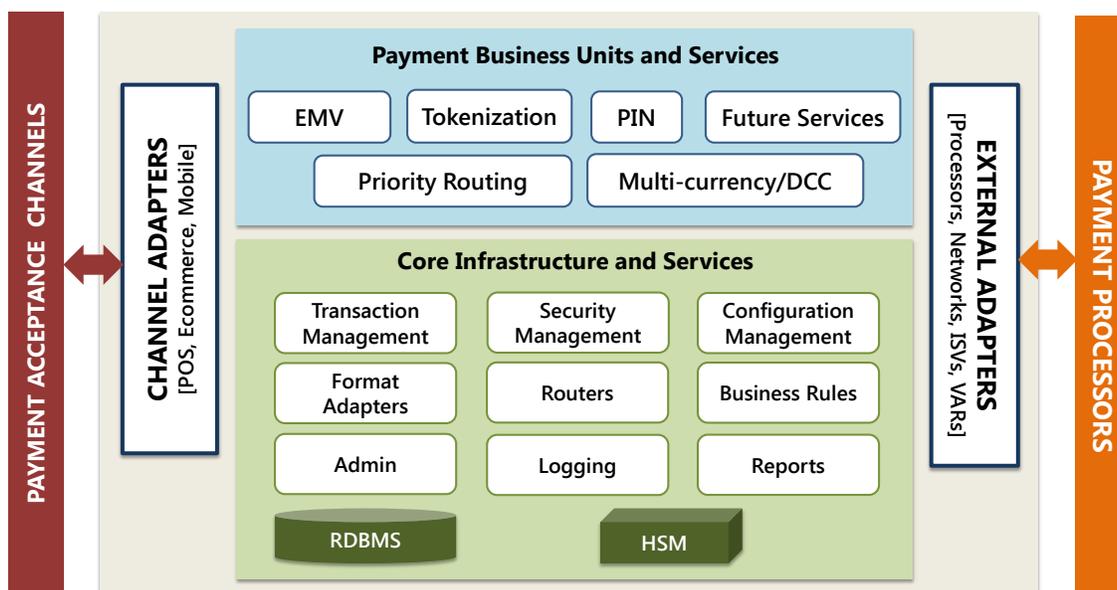RS Software

iFinSwitch™

The Race for Market Share

With the rapidly changing payments ecosystem across the world, the need for faster payments at increased ROI has become the key differentiator for staying ahead in the competition. A payment gateway can significantly change the way payment service providers approach the marketplace, by giving them the freedom to own the payment transactions, the ability to connect to multiple payment processors and the flexibility to provide value added services to merchants in terms of reporting and analytics.

iFinSwitch™ from RS Software

iFinSwitch™ is a digital switching platform from RS Software. It is designed with all the basic features of an authorization switch supporting rule-based transaction orchestration, workflow management, routing, format adapters, time-out processing, assured transaction response, encryption management, logging and audit trails. Built using modular micro service based architecture, the multi-purpose platform can be used like a payment gateway, a front-end processor or a fully functional processing platform. Its API based communication ensures it can communicate with most modern devices using API based calls. A contextual view is presented below.

PAYMENT ACCEPTANCE CHANNELS

CHANNEL ADAPTERS [POS, Ecommerce, Mobile]

Payment Business Units and Services

| EMV | Tokenization | PIN | Future Services |

| Priority Routing | Multi-currency/DCC |

Core Infrastructure and Services

Transaction Management	Security Management	Configuration Management
Format Adapters	Routers	Business Rules
Admin	Logging	Reports

RDBMS   HSM

EXTERNAL ADAPTERS [Processors, Networks, ISVs, VARs]

PAYMENT PROCESSORS

iFinSwitch™ Basic feature set

1. Supports both Card Present (CP) and Card Not Present (CNP) transactions
2. Capable of EMV transactions
3. The following transaction types are supported:
   - Authorization
   - Partial Authorization
   - Sale
   - Void
   - Return
   - Reversal
4. Uses Hash Message Authentication Code (HMAC) mechanism to authenticate the transactions
5. Capable of routing to major processor defined format
6. Logs all transactional activities at all stages
7. Capable of sending batch files to processors on a daily basis
8. Generates reports

iFinSwitch™ Extended feature set

1. Tokenization
2. Recurring payments
3. Batch processing
4. ACH payment
5. Virtual Terminal
6. Auto-reconciliation
7. Transaction based analytics
8. Admin portal and Dashboard

Technology

iFinSwitch™ comes in two popular technology choices:
- Microsoft .Net technology
- Java based open technology

Key Technical Features

- Supports both Active-Active as well as Active-Passive[DR] architecture for high throughput
- Horizontally and vertically scalable architecture
- End-to-end data encryption with as high as 2048 bit encryption supporting all standard algorithms like TDES, SHA2, AES, TLS etc.
- Support for open source databases and middleware
- Context-free servers and asynchronous queues
- Configuration and scripting to achieve localization
- Resilience through clustering with DR via the database
- Memory-based queuing and NoSQL for transaction data

Deployment

The basic payment gateway is an RS proprietary digital asset that comes ready to be deployed on a cloud hosted infrastructure (AWS or Azure) or can be hosted in a customer data center or in-premise.

The extended feature set is available as add-ons and can be deployed separately based on the customer requirement. Additional features and customization options are available as per customer needs.

The iFinSwitch™ basic hosting and implementation typically take between 8 and 10 weeks' time with one processor integration and certification with one single brand and model of a PIN entry device. In-premise deployment typically takes an additional 2-3 weeks.

If a client site is not PCI compliant, it takes an average of 4-5 weeks for completing PCI compliance and due diligences. RS will work with the client's choice of deployment infrastructure to deploy the gateway and get it PCI certified through a PCI certification agency.

Additional processor and device integration can be implemented as per customer requirement. RS recommends doing 2 processor certifications in parallel to utilize the processor response time effectively.

Why RS Software

RS Software is the leading custom software development house for the payments industry. With more than 25 years in the payments industry, we have participated in and helped create the products and services that have transformed this marketplace. Our proven methodologies, comprehensive set of services and continuing innovation are focused specifically on the needs of the space we have served exclusively since we opened our doors in 1991. No other provider in our space can deliver more industry knowledge and experience.