

EnterpriseConnect FPS

An Application Engine for
Faster Payment Services



Contact Info

Unit 511, Lakeside 1, 8 Science Park W. Avenue
Hong Kong Science Park, Shatin, N.T., Hong Kong
Phone: +852 3125-9000 Fax: +852 2668-2166
<http://www.iaspec.com>

© iASPEC, all rights reserved

EnterpriseConnect FPS

An Application Engine for Building your Faster Payment System

Faster Payment System

To address the increasing market needs for more efficient retail payment services, the HKMA has announced the roll-out of a Faster Payment System (FPS) in late 2018.

The FPS will enable the public to make round-the-clock payment in a real-time manner. It will enhance payment convenience and efficiency for individuals and businesses, promote healthy competition between banks and non-bank payment service providers.

Why EnterpriseConnect FPS

The standard EnterpriseConnect product is a leading store-and-forward, high-performance and secure messaging platform designed and developed by iASPEC. It has been deployed in governments and enterprises in China and in the United States since 2002 supporting mission-critical applications.

EnterpriseConnect FPS is an extended version of the EnterpriseConnect product. The extension is designed to support the specific requirements of the FPS and the set of standards released by the Hong Kong Monetary Authority. It aims at helping the banks to easily implement the FPS functions by integrating this product with their core bank and online banking systems .

The EnterpriseConnect FPS software package includes:

- The FPS core application engine with all the FPS services implemented and ready for connecting into the HKICL FPS network.
- A comprehensive set of FPS Back Office Administration (BOA) functions supporting the bank's operational need

Professional Services

We offer professional services for customization and integration of our FPS solution with the bank's systems.

Business Benefits

Easy Implementation of the FPS Services

EnterpriseConnect FPS is an application engine designed for quick implementation of the FPS services. It supports the complete set of FPS features and able to process the FPS services through batch or real-time mode automatically.

Back Office Administration

The Back Office Administration console is designed to support FPS management and control operation. Includes comprehensive set of operational support functions, such as: daily reconciliation, system monitoring, exception handling, digital certificate management, and payee name matching.

Technical Benefits

Ease of FPS Application Development

A set of easy to use API is exposed to the application programmers. Customers can easily integrate their core bank and online banking systems with this product in order to implement the full set of FPS services.

Application designers can be more focused on the UX design to realize the new FPS functions on their online banking and mobile banking services. The complexity of the FPS internal processing and interfacing with the FPS network is left to the EnterpriseConnect FPS application engine.

Highly scalable and reliable

The product can be deployed in a load-sharing (active/active) or backup stand-by mode to meet different scalability and reliability requirements.

IBM MQ and HSM Integration

EnterpriseConnect FPS is integrated with IBM MQ for sending and receiving ISO 20022 messages. HSM (Hardware Security Module) is used for safe-keeping of the digital certificate used in signing of the messages.

EnterpriseConnect FPS Core Features

- Support the Full set of FPS Functions
Including core services such as: Credit Transfer (C1/C2/C3), Direct Debit, Refund/Return, and the overlay services such as: Electronic Direct Debit Authorization, Proxy ID registration and management. For all these FPS services, the EnterpriseConnect FPS engine performs extensive verifications to ensure the messages are good and proper before submitting them to HKICL. Post credit/debit transaction, reversal/return are processed automatically and they extensively verified against the core bank systems to guarantee their validities. These features greatly simplifies the design and development of the online banking and payment systems that are integrating with the EnterpriseConnect FPS application engine.
- Daily Reconciliation
Conducts daily reconciliation by comparing HKICL's Daily Payment Details Data File with the its' own maintained ledger records. When discrepancies are found, generates exception report.
- Account Balance Alert
It captures notification messages and generates alert to operation or treasury department if and when the FPS settlement account balance is lower than the present threshold.
- Real-time or Batch Mode Auto Selection
Automatic selection of Real-time mode (MQ based) or batch mode (file based) operation. When the real-time mode operation is suspended, all the non-time-critical messages will be automatically routed to batch mode without human intervention.
- Automatic Recovery and Exception Handling
Self-recovery is built into the EnterpriseConnect FPS engine for handling momentary network connection failures. The store-and-forward feature will guarantee there is no loss of messages. For persistent problem that cannot be recovered from, alert messages will be sent and the BOA console provides the functions for the exception handling and manual intervention.
- Bank's Certificate Management
It manages the digital certificates, including the association of general purpose certs and special purpose certs with the designated Signer records.
- Payee Name Matching
A configurable name matching engine supporting probabilistic matching of the Payee Name on the EnterpriseConnect (FPS) to the Payee Account Name. This engine can be "trained" to accept name variations per account.
- Protect of e-Cert using HSM
EnterpriseConnect FPS integrates seamlessly with HSM manufactured by different vendors for the protection of digital certificates. Banks can choose their own HSM by implementing different software adapters for these HSM products. All digital signatures functions are performed inside the HSM without the risk of exposing the digital certificates.
- Different application scenarios
A variety of FPS payment scenarios are supported, including Request to pay, for which we can generate the required QR code for Credit Transfer or One Time Direct Debit Authorization.

Operating Environment

Operating System

Windows (x86/x64) w/JRE 1.8 or above
Unix/Linux (x86/x64) w/JRE 1.8 or above including RHEL 6+ and SLES 10+
Virtual and Physical machine environment

Application Server

J2EE 5+ Application Server

Database

Relational DB via JDBC
Oracle 9i or above
IBM DB2
Sybase
SQL Server 2008 or above (All editions)

The iASPEC Technologies and Services group is a leader in supplying Identity Management, PKI-based Digital Signature, Secure Messaging technologies and solutions to the public sector and financial service sector.

Brief history of the Group in these areas:

1988 – Founding of the Company in Hong Kong.

2005 – Released the AT.Pass, an award winning One-Time-Password authentication solution.

2009 – Released the AT.Sign digital signature solution. AT.Sign is currently deployed by government departments, public service organizations and large enterprises in Hong Kong and Mainland China to support various digital signature applications.

2011 - Launched SecurDS, a cloud-based digital signature service based on the AT.Sign technology,

2013 - Received the Most Reliable Offshore Software Development Services from Mediazone Group for its achievement in software services.

2014 – Extended the standard AT.Sign product to support e-Cheque.

2015 – Received the Hong Kong Internet Finance Award (Bronze) for the AT.Sign(for e-Cheque) software product.

2016– Asia Pacific CIO Outlook Magazine named iASPEC as one of the top 25 technology providers to the Public Sector.

