

SOLUTION BRIEF

Innovitegra Middleware Solution (IMS)

Empowering Seamless Financial Transactions

Innovitegra Middleware Solution (IMS) emerges as a transformative force in the realm of financial technology, redefining the landscape of secure and efficient electronic transactions. Crafted meticulously by Innovitegra Solutions Private Limited, IMS is a comprehensive solution that seamlessly integrates key components, including the EFT Switch, Debit and Prepaid CMS, Electronic Service Bus, Agency Banking, ATM & POS Monitoring, and Merchant Portal Solutions.

Empowering Seamless Financial Operations:

IMS is more than a middleware solution; it's an empowering force designed to revolutionize the way financial transactions unfold. At its core, IMS is driven by a commitment to deliver a secure, user-friendly, and interconnected platform for electronic fund transfers, card management, electronic service integration, and transaction monitoring.

Strategic Integration for Enhanced Security:

IMS doesn't just facilitate transactions; it secures them with the strategic integration of Thales products, specifically the payShield 10K Hardware Security Modules (HSMs). These HSMs play a pivotal role in ensuring the security and integrity of IMS, from secure PIN generation to robust encryption processes for interchanges with global entities like VISA and Mastercard.

Meeting Today's Financial Challenges:

In an ever-evolving financial landscape, IMS rises to the challenges faced by the BFSI sector, providing solutions that go beyond industry standards. From real-time monitoring to comprehensive card management, IMS addresses the complexities of modern financial operations.

Your Gateway to Secure Financial Transactions:

IMS is more than a solution; it's your gateway to secure, streamlined, and efficient financial transactions. As we usher in a new era of financial technology, IMS stands as a testament to our commitment at Innovitegra Solutions to empower organizations with cutting-edge solutions tailored to meet the demands of the digital age.

IMS is a cutting-edge middleware solution designed to enhance the efficiency and security of financial transactions. It tackles challenges associated with the ever-changing financial environment, ensuring compliance with industry standards and regulations. The solution is poised to address the increasing demand for secure, reliable, and streamlined financial operations.





The Business Challenges Addressed by the Solution:

In the dynamic landscape of financial technology, Innovitegra Middleware Solution (IMS) stands as a robust answer to critical business challenges. This comprehensive solution addresses the evolving needs of the financial sector, providing a seamless and secure environment for electronic fund transfers, debit and prepaid card management, electronic service integration, and ATM & POS monitoring.

The solution is strategically designed to overcome industry challenges, compliance requirements, and address the pain points of end customers.

Challenges Addressed:

- Ensuring secure electronic fund transfers
- Efficient management of debit and prepaid card systems
- Seamless integration of electronic services
- Real-time monitoring of ATM & POS transactions

Compliance Requirements and Industry Trends:

IMS not only addresses compliance requirements but also aligns with emerging industry trends, mitigating business risks and enhancing overall operational resilience.

End Customer's Pain Points Resolved:

IMS addresses the end customer's pain points by providing a secure and user-friendly platform for financial transactions, ensuring peace of mind in every electronic interaction.

Solution Detail:

Components of the Solution:

IMS comprises:

- > EFT Switch
- Debit and Prepaid CMS
- ➤ Electronic Service Bus
- Agency Banking
- > ATM & POS Monitoring
- Merchant Portal Solutions

High-level Capabilities and Features:

- > Real-time transaction monitoring
- > Comprehensive card management
- > Seamless integration with electronic services
- ➤ Robust ATM & POS monitoring
- ➤ Intuitive merchant portal solutions
- > Specialized Features for Agency Banking:

Innovitegra Solutions INNOVATE. INTEGRATE. CSAT

Solution Key Features and Benefits:

- Real-time Transaction Monitoring:
 - o Proactive monitoring for quick issue resolution.
 - o Extended to accommodate the unique dynamics of Agency Banking.
- Comprehensive Card Management:
 - o Seamless experience for card issuance and maintenance.
 - o Enhanced to meet the intricate requirements of Agency Banking.
- > Seamless Integration with Electronic Services:
 - o Harmonious integration with diverse electronic services.
 - o Support for mobile banking, digital wallets, and other electronic channels.
- ➤ Robust ATM & POS Monitoring:
 - o Continued robust monitoring of ATM and POS transactions.
 - o Amplified to address the unique challenges of Agency Banking scenarios.
- ➤ Intuitive Merchant Portal Solutions:
 - o Tailored to meet the specific needs of Agency Banking partners.
 - o Effortless navigation and management for agents and merchants.
- > Specialized Features for Agency Banking:
 - o Streamlined agent onboarding and management.
 - o Enhanced transaction tracking and reporting for agency networks.
 - o Seamless integration with agency-specific electronic services.
 - o Secure and user-friendly interface for agents conducting financial transactions

Thales Product Integration:

Thales products, specifically the payShield 10K Hardware Security Modules (HSMs), are integral to the robust security architecture of Innovitegra Middleware Solution (IMS). The payShield 10K HSMs play a central role in ensuring the security and integrity of critical operations within IMS.

Purpose of payShield 10K Integration:

- **PIN Generation:** The payShield 10K HSMs are leveraged for secure PIN generation, a crucial aspect of authentication in financial transactions.
- **Key Management:** These HSMs are strategically employed for cryptographic key management, facilitating secure and efficient encryption processes.
- Encryption for Interchange: payShield 10K HSMs play a vital role in securing communications between Self Service Terminals (ATM, Kiosks, POS) and interchanges such as VISA, Mastercard, and others. The encryption process enhances overall data security during interchanges, safeguarding sensitive information.

This strategic integration of Thales payShield 10K HSMs enhances the overall security posture of IMS, ensuring the confidentiality and integrity of data across various critical processes. Thales' HSM technology provides a robust foundation for secure financial transactions within the IMS.

Key Command / Functions used with payShield 10K integration:

Below are some of the commands / functions used with payShield 10K integration with IMS

- HC, IA [Generating Dynamic TPK from TMK, Generating ZPK from ZMK]
- CA, DA, EA [PIN Block Translation, Terminal PIN verification, Network PIN verification]
- JC, JE [Translate PIN from TPK to LMK, Translate PIN from ZPK to LMK]
- DE, CY [Terminal PIN Offset Generation, Verify CVV Req]
- Verify ARQC and generate ARPC
- Verify and Generate MAC



Architecture Diagram



About Innovitegra Solutions Private Limited:

Innovitegra Solutions Private Limited stands at the forefront of the financial technology sector as a trailblazer in providing cutting-edge solutions. Committed to excellence, we empower organizations with innovative middleware solutions, fostering secure and efficient financial operations.

Our Distinctive Features:

Strategic OEM Partnerships: We proudly collaborate with industry-leaders like Thales, to deliver best-in-class solutions. This strategic partnership ensures that our software solutions are fortified with the latest technologies and adhere to the highest standards of quality and security.

Comprehensive Service Offerings: In addition to our flagship middleware solutions, we offer a spectrum of services tailored to meet the diverse needs of our clients:

Resource Augmentation: Our expert team is ready to augment your workforce, providing skilled professionals to enhance your project capabilities.

Custom Software Development: Tailored to your specifications, our custom software development services ensure that your unique requirements are met with precision.

Consultancy Services: Benefit from our industry insights and expertise through consultancy services designed to guide you through strategic decisions and technological advancements.