



Ensuring Secure Payment Data with Atos Syntel's Data Security Remediation Factory

Cards and payments companies have huge volumes of files and databases containing historical data which can be analyzed and processed. However, moving unencrypted data between parties puts this sensitive customer data at risk. Performing a manual impact analysis for data encryption is time consuming, and manual data validation and testing further slows the process.

Today's card services companies need an end-to-end PCI DSS (Payment Card Industry Data Security Standard) complaint solution to remediate sensitive data.

Typical challenges include missed deadlines because of conflicting priorities, constraints on SME time and bandwidth, issues managing capacity, operational issues, and establishing proper ownership, governance and control across the IT environment.

Solution

Atos Syntel has developed a multi-pronged approach and factory model to expedite the remediation process that leverages the industry-leading Voltage data security solution as well as a suite of open source accelerators.

Voltage is a PCI DSS compliant payments security solution that prevents unauthorized access by encrypting structured and unstructured data. It supports Format-Preserving Encryption (FPE), which encrypts data without altering the database schema, by making minimal changes to applications that need to view clear text data. In many cases, only a single line of code is modified.

By leveraging the Voltage encryption API, Atos Syntel has developed custom tools for real-time encryption that secures data in motion and data at rest. Our solution is compatible with a wide variety of technologies like Java, .NET, C++, VB 6.0, VC++, MS Access, MS SQL Server and Oracle. We use a custom application assessment methodology that enables precise estimation of the effort and timeline, then deploy our toolset across the entire application remediation lifecycle.

Remediation Phase	Tool	What the Tool Does
Discovery and Analysis	Analyzer	Analyses code, searches for keywords and generates reports for developers to remediate the code piece, irrespective of the source language.
Code Remediation	File Encryption	Encrypts/decrypts the specified fields present in files in a particular directory
	One-time Database Encryption	Encrypts/decrypts the specified fields in a selected database
Data Validation and Testing	Word Select File Encryption	Validates data for unit testing and production support for random checks between original value and encrypted value from the DB or file storage

Business Benefits



70% reduction in analysis effort



50% faster delivery, compared to manual remediation



45% reduction in remediation time for stored files and historical data



30% faster unit testing and data validation

Value Adds

- Better product quality and faster time-to-market through improved test coverage and increased automation
- Easy maintenance and visibility into the end-to-end data security process
- Single-click encryption for data in files and historical databases
- Clean, intuitive user interface for easier project execution

Case Studies

For a leading financial services processor, we employed our automated tools and factory model to enhance the delivery of a key legacy C++ application as well as applications based in Java. The report provided by Atos Syntel's Analyzer tool helped developers understand the remediation needs. The remediation tools quickly executed a one-time encryption for the client's existing files and databases, and we were able to simplify and expedite data validation and unit testing with the Word Select tool.

For a leading financial services company, Atos Syntel deployed our Data Security Remediation Factory solution to quickly analyze and remediate two critical online Statement and SAS applications in legacy .Net 2.0. Our automated tools and accelerators ensured that the project was delivered ahead of schedule and met all quality targets.

About Us

Atos Syntel is a leading global provider of integrated information technology and knowledge process services. Atos Syntel helps global enterprises evolve the core by leveraging automation, scaled agile and cloud platforms to build efficient application development and management, testing and infrastructure solutions. Our digital services enable companies to engage customers, discover new insights through analytics, and create a more connected enterprise through the internet of things. Our "Customer for Life" philosophy builds collaborative partnerships and creates long-term client value by investing in IP, solutions and industry-focused delivery teams with deep domain knowledge.

To learn more, visit us at: www.atos-syntel.net