



Sun™ and Euronet Essentis

Offering powerful, open, flexible
global card payment solutions



In the battle to attain a competitive edge, financial institutions are reaching across borders and extending traditional boundaries to offer services to a global marketplace. The ability to compete globally places demands on infrastructure — more complexity, greater agility, increased costs, and extreme performance — in order to process transactions efficiently and maintain customer service levels. The Euronet Essentis suite of global payment card solutions running on Sun platforms can help financial institutions to compete successfully in an increasingly complex, connected, and competitive marketplace.

Highlights

- Compete effectively with powerful, agile, cost-efficient next generation technologies from Sun™ and Euronet Essentis
- Select from different Essentis modules for payment card issuing and merchant management
- Support global business with multiple currency, multilingual modules for a wide variety of products and institutions
- Obtain a single, real-time view of customers and transactions through a centralized database that facilitates customer service and additional selling efforts
- Leverage an open, service-oriented architecture to integrate existing IT resources and legacy applications for greater return on investment
- Optimize the Essentis software performance by implementing a powerful, high-speed Sun infrastructure
- Choose Sun systems for a solution that can scale to fit requirements as the business grows

Globalization brings new challenges

As more businesses work to reach markets worldwide, increased competition is creating unique challenges for financial services organizations.

Complexity

When acquiring new customers, global card issuers often need to conduct business in multiple currencies, handle different languages, and offer many diverse card-based products. Emerging intelligent card technologies entail increased data and processing requirements over traditional magnetic stripe cards. In addition, different payment networks, regulations, and standards in various countries and regions add complexity to day-to-day business operations. Successfully managing an international card portfolio for multiple card issuers requires the ability to administer that portfolio on a single platform to maximize efficiency and minimize complexity.

Lack of agility

Increased competition coupled with a wide range of consumer products makes it critical for card issuers to react quickly and offer innovative solutions to attract new and retain existing customers. The need for a swift reaction to market conditions poses obstacles to organizations running legacy systems.

Frequently structured with multiple platforms for different functions, legacy tools often are not flexible enough to accommodate different operations within a single software application. The result is silos of information that cannot be mined — or even shared — on systems that cannot be easily modified. This lack of flexibility limits new offerings and enhanced features and functionality for card products.

Card issuers must also be able to adapt swiftly to modifications in compliance regulations and implement new interchange formats without extensive development work. Furthermore, as new delivery channels revolutionize payment systems markets, card payments infrastructures must be capable of integrating with both traditional delivery channels as well as emerging technologies.

Costs

Relying on legacy systems to run card payments software can significantly impact the bottom line. The cost of maintaining existing legacy systems can be prohibitive and service contracts on older equipment can be far more expensive than for new systems. Administering different systems, platforms, and applications is inefficient, may require hiring multiple administrators with expert skill sets, and increase costs even further.

Lack of performance

Transaction processing lies at the heart of the payment card business. Inefficient processing operations can lead to lost revenue, customer dissatisfaction, processing backlogs, and lost time for card processors. The introduction of new standards and interchange formats places new demands on transaction processing, and systems must be able to handle the increased levels of data provided by newer chip-based cards.

The Essentis payment card issuing and merchant management solutions

Essentis offers global solutions for payment card issuing and merchant management. With complete support for multiple products, currencies, languages, and institutions, Essentis solutions are designed to handle a challenging and dynamic global marketplace on a single, consolidated platform. In addition, Essentis enables clients to embrace new standards such as Payment Card Industry Data Security Standard (PCI DSS), Europay, MasterCard, Visa (EMV), and Single Euro Payments Area (SEPA), and technologies such as service-oriented architecture (SOA), turning them into tangible business benefits. Essentis can manage a complete range of card products, as well as other offerings such as fixed term loans. The system supports private label, store, bank, and co-branded card programs, and incorporates compliance with major international payment schemes.

Essentis Issuer

One of the world's most advanced card management solutions, Essentis Issuer enables firms to maximize revenues while minimizing risk. Essentis Issuer supports products including debit, charge, revolving credit, pre-paid, and business and purchasing card programs, provides a single view of all unsecured lending products held by a customer, and manages the exposure to that customer under a single line of credit.

The powerful, innovative Essentis Issuer software helps to further minimize risk by passing data to external systems and applications in order to develop profiles or check against behavioral scoring.

Essentis Acquirer

Offering a comprehensive merchant management system, Essentis Acquirer provides complete control of the merchant accounting and settlement processes. Developed to meet the demands of a truly international business, Essentis Acquirer fully supports multiple currencies. Ideally suited to managing cross-border acquiring operations, Essentis Acquirer supports multilevel merchant hierarchies, with different currencies utilized at each level. Posting and settlement operations can be adjusted to suit multiple time zones, and the needs of the merchant and schedules can be introduced for managing several national electronic clearing schemes. The solution offers automatic transaction settlement with merchants, facilitates the collection of fees and charges, and provides flexible statement options.

Essentis Interchange

Designed to offer ease of maintenance and support, Essentis Interchange provides central management of monetary transactions for a flexible transaction management, clearing, and settlement solution. With efficient, reliable, and cost-effective transaction processing for payment card issuers and merchant acquirers, Essentis Interchange also offers clearing and settlement interfaces to major international payment card schemes.

Essentis software combats fraud

Smart cards are revolutionizing banking by providing stronger security and the ability to offer many additional applications, not just debit or credit functions.

The newest standard, EMV for chip cards, is helping to reduce fraud and generate new revenue streams and services. Essentis Issuer is fully compliant with EMV, enabling firms to conduct EMV processing for both debt and credit card products.

A fraud component in Essentis Acquirer monitors and highlights unusual activity, applying certain actions according to user defined and selected block codes. Monitoring of different criteria depends on parameters defined for individual merchants, for individual merchant category codes, or for ranges of merchant category codes. Essentis fraud monitoring velocity checks enable banks to control the volume or amount of activity within a period regardless of whether the activity has been settled. The Essentis software supports the fraud monitoring and reporting requirements of Visa International, MasterCard, and MasterCard Europe for greater flexibility.

A centralized database provides an edge

A powerful relational database forms the core of the Essentis Issuer software. Card issuers can obtain a single, real-time view of clients and transactions, and readily available data enables profiling and segmentation operations. Profiling helps sales teams to identify new business opportunities, and segmenting the customer base is key to the development of targeted marketing and promotional campaigns.

The centralized database enables Essentis Acquirer to support merchant management operations in different countries through the use of a single, centrally-located system, acquiring transactions for merchants in other countries and the currencies in which they trade. Settlement can be performed and country-specific clearing formats, transaction, and service fees can be applied in any currency for a truly international business.

Essentis Interchange contains a central transactions database — but separate modules to handle interchange requirements for MasterCard, MasterCard Europe, Visa International, American Express, and Japan Credit Bureau (JCB) — enabling independent management of multiple card schemes with a single version of the software. By leveraging a centralized database, the Essentis software helps organizations to focus on customer relationships and enhance customer service delivery.

The Essentis architecture thrives on Sun platforms

The Essentis software utilizes a flexible, open, client-server architecture that facilitates integration with third-party systems, internal, and external applications. In addition, Essentis can be readily integrated with SOA environments such as those provided by the Sun Java CAPS platform. All Essentis services and transactions can be accessed via an XML message interface. Supporting open access by end users and other application systems, the Essentis software can leverage applications such as authorization and switching systems, customer databases, behavioral scoring, and core banking and general ledger. The architecture supports two-tier and three-tier client-server solutions and utilizes a thin client concept as illustrated in Figure 1.

Implement powerful, flexible Sun server platforms

Processing card payment transactions requires powerful systems that can keep pace with demand. Sun offers flexible platforms that can accommodate and adapt to changing needs, providing the ideal infrastructure for the Essentis global card payment software. Sun systems range from entry-level blades and rackmount systems to high-performance, enterprise-class servers that can dramatically increase throughput and reduce energy consumption.

Running on UltraSPARC™ processor-based servers, the Essentis software can take advantage of innovative Sun technologies for scalable solution infrastructures.

Leverage stellar Solaris™ 10 Operating System performance

Fast servers need equally speedy operating systems in order to deliver optimal system performance. The result of significant investments in R&D, the Solaris™ 10 Operating System (OS) delivers exceptional performance, stability, and security and has set and reset dozens of performance and price/performance world records on a wide range of benchmarks.

With a number of performance advances such as a redesigned TCP/IP stack that delivers a 30 to 50 percent improvement in network throughput, the Solaris 10 OS can help boost Essentis software performance.

Increase uptime

Maximizing system uptime requires having a thorough understanding of what the system is doing, particularly if it is experiencing problems within the software stack. The Solaris Dynamic Tracing facility (DTrace) is a unique tool that provides a dynamic tracing framework for troubleshooting systemic problems in real time on production systems to help improve application performance and reduce unplanned downtime.

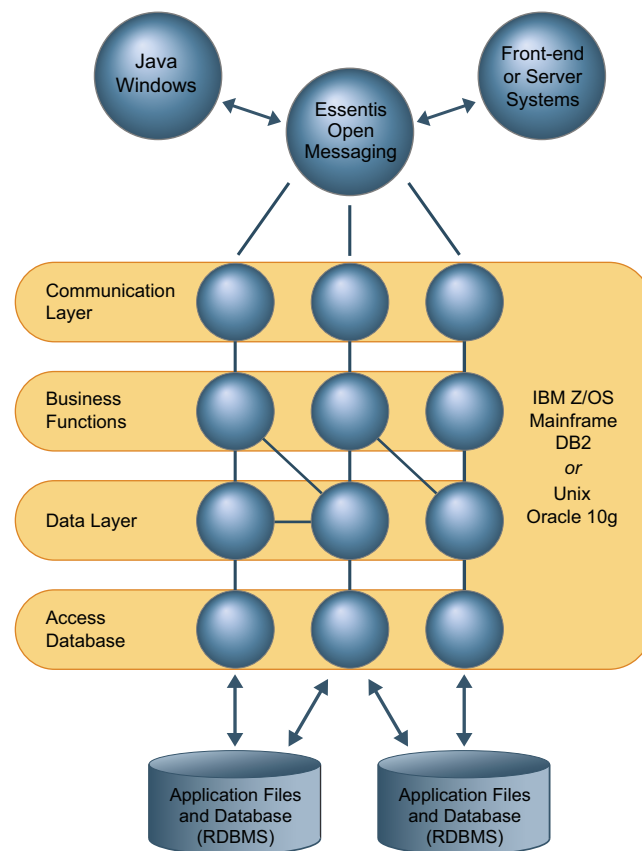


Figure 1. The flexible, open Essentis multitiered architecture.

Another innovative Solaris 10 OS feature, Predictive Self Healing provides technology to accurately predict component failures and mitigate many serious problems before they actually occur. As a result, running Sun platforms and the Solaris 10 OS can help quickly identify and resolve hardware issues for greater stability and increased uptime.

Optimize utilization

System administrators traditionally run applications requiring an isolated environment on separate servers, resulting in multiple systems that often are not fully utilized. Solaris Containers isolate software applications and services, enabling the creation of multiple contained execution environments within a single instance of the Solaris 10 OS. Use of Solaris Containers technology can facilitate consolidation of multiple programs or environments onto a single server for optimal system utilization.

Enforce security

Recently, a highly publicized incident led to increased regulatory oversight of banking and other financial services sectors and reinforced the need for well-fortified system security measures. The Solaris 10 OS incorporates powerful security improvements that can help satisfy regulatory requirements for strong protection against unauthorized access or system tampering. With unique User and Process Rights Management, administrators can grant users and applications only the minimum capabilities needed to perform tasks at hand.

Applications do not need to be altered in order to take advantage of this security feature. Including a host of flexible, popular authentication features, the Solaris Kerberos Service delivers Kerberos-based protocols that enable enterprise single sign-on. The Secure By Default networking profile automatically turns off unneeded services to reduce attack exposure while leaving the system fully functional.

Contain costs

Legacy systems typically add significant line items to IT budgets. In addition to helping to boost application performance, workforce productivity, and competitive advantage, Sun platforms offer compelling features at a lower cost of entry than traditional mainframe solutions. Sun's breakthrough technologies result in solutions featuring ease of use, lower costs, increased flexibility, scalability, high capacity, and reliability.

Choose scalability

Capturing new, emerging markets and growing the business can prove difficult with proprietary, closed systems. Because all Sun servers run the powerful Solaris 10 OS, organizations can start out with a proof of concept and scale the solution as the business grows, enabling firms to select a system fitting current requirements without sacrificing future needs.

About Sun and Euronet Essentis

Euronet Essentis Ltd has been successfully delivering solutions to the card payments industry since 1986.

Learn More

To learn more about the Sun and Essentis solution, visit sun.com, essentis.com, or contact your Sun representative.

Specializing in back-office card issuing and merchant management solutions, Essentis demonstrates a proven track record in delivering systems compliant with Visa and MasterCard requirements, responding rapidly to card scheme initiatives such as EMV, and maintaining compliance as regulations evolve.

With over two decades of technology experience, Sun continues to provide the financial services industry with flexible, scalable, innovative, and cost-effective solution infrastructures. Incorporating the latest technologies, next generation processors, and improved reliability, manageability, and serviceability, Sun solutions facilitate the adoption of leading edge, high-bandwidth infrastructures, service-oriented architectures, and services. The Sun and Essentis solution yields greater efficiency and performance while improving scalability and reliability. In addition, the solution helps reduce costs and shorten time-to-market for new card offerings, accelerate delivery of services, and increase return on investment. Together, Sun and Essentis help firms navigate an increasingly competitive, global industry by helping to deliver competitive advantages and flexible solutions that can adapt to future requirements of the card processing business.



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