VisaNet

CATALYST FOR COMMERCE

Network Services Guide
The world of commerce is changing. Whether you’re talking about trade at the local, national, or global level, more is becoming possible every day. Electronic payments are key to making the most of these opportunities.
Transforming business. Empowering economies.

When it comes to enabling electronic payments, the network you process on is key to sustained success. VisaNet, the world’s largest electronic payments network, delivers innovative processing services with the power to help businesses thrive and economies grow.

VisaNet’s client-customized solutions include products, services, and features that meet unique business needs. By partnering with Visa, you can:

**Foster business growth.**
Do more business more easily, around the corner or around the world. Configure your own solutions for traditional retail, e-commerce, and more.

**Facilitate domestic transparency and control.**
Customize national or regional networks to provide flexibility, visibility, security, and drive economic progress.

**Increase global connectedness.**
Reach beyond your borders to tap into expanded geographies, discover new digital markets, and participate in the burgeoning global economy.

From lowering economic barriers and stimulating commerce to transcending borders and enabling frictionless exchange, electronic payments are the future.
One size does not fit all when it comes to electronic payments and financial services. Every region, country, industry, and business has a unique set of needs for maximizing success. That’s why VisaNet offers custom solutions that can be easily scaled from meeting the most basic local efficiency needs to the most complex regional or global processing requirements.
The future is yours to build. With VisaNet, you can create the future you want. A future that fits your unique needs. A future in which financial institutions and governments can effectively serve. A future that enables businesses and broader society to succeed.

ACCESS & ACCEPTANCE
Connect reliably and securely to the network and the consumers and businesses you interact with across geographies and delivery channels.

2  Network Connectivity
4  Merchant & Acquirer Solutions
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TRANSACTION PROCESSING
Count on proven, dependable core payment capabilities that can be configured to meet the unique needs of consumers, businesses, and governments.

18  Scalable Processing
23  Control & Transparency
29  Risk Management
34  Reliability
36  Security

BUSINESS INTELLIGENCE
Transform payment data into actionable insights with value-added services that help you enrich the transaction experience, improve operations, boost performance, and analyze trends.

44  Experience Enrichment
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49  Network Optimization
ACCESS & ACCEPTANCE

Connect to the Future of Commerce

VisaNet is far more than a payments infrastructure. It’s a flexible set of innovative services that provide performance, visibility, and control to enable business to get done with greater confidence and total trust.
VisaNet Access & Acceptance solutions provide a reliable, secure connection to the network and the consumers and businesses you transact with. Reach across geographies and delivery channels using easily implemented Visa innovations that can also help you reduce friction in your payment processing.

**Network Connectivity** — Connect to the electronic payments network on your terms.

2  Visa Extended Access (EA) and Visa Direct Exchange (DEX)

**Merchant & Acquirer Solutions** — Connection options and solutions to maximize merchant efficiencies.

4  Merchant Direct Exchange (MDEX)
5  Gateway Services
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Network Connectivity

With VisaNet you have an array of reliable and secure network connectivity options that can scale to meet your needs, reduce infrastructure investment, and manage processing complexity.

VISA EXTENDED ACCESS (EA) AND VISA DIRECT EXCHANGE (DEX)

SECURE AND RELIABLE ACCESS

What it does

Visa Extended Access (EA) and Visa Direct Exchange (DEX) provide a secure way for institutions and governments to connect directly to VisaNet for fast, efficient acceptance and authorization of all types of card transactions using one message format. These single, redundant IP connections to VisaNet are the key to all VisaNet value-added services.

What it delivers

- **Efficiency.** Reduce transaction response times and control hardware and operational costs.
- **Flexibility.** Handle a variety of message types over a single connection, including BASE II, VIP, SMS, as well as a variety of authorization, clearing, and settlement related reports and data. Process all major credit and debit payment brands, including Visa, MasterCard, Star, NYCE, and more.
- **Performance.** Enjoy high-performance delivery between endpoints, applications, and the VisaNet system.
- **Simplicity.** Automatically route all types of transactions and files including non-financial payment-related data to multiple applications.
- **Security.** Keep data safe with a trusted network, industry-leading firewalls, encryption, and access detection.
How it works

Visa Direct Exchange includes three core services — Visa Message Gateway, Visa Open File Delivery, and Visa File Exchange Service. Together, these connective services make processing online transactions and exchanging reports and batch files with other endpoints or VisaNet services like Visa Resolve Online (VROL) or Visa Account Updater (VAU) highly effective.

Visa Direct Exchange uses two separate circuits and two diverse carriers to ensure availability.

1. **Visa Message Gateway.**
   Intelligently routes authorizations for Visa and non-Visa transactions in real time between VisaNet and its certified endpoints.

2. **Visa Open File Delivery.**
   Supports high-volume batch file transfers (e.g., clearing files or reports).

3. **Visa File Exchange Service.**
   Enables secure, ad hoc file transfers over the public Internet from individual workstations.
Merchant & Acquirer Solutions

VisaNet offers a variety of direct solutions to benefit your business.

**MERCHANT DIRECT EXCHANGE (MDEX)**

**ENABLING HIGH-VOLUME MERCHANT DIRECT CONNECTIONS**

**What it is**

Visa Merchant Direct Exchange allows large merchants to connect directly to VisaNet. This enables fast implementation of the latest payment innovations and provides a more efficient path to international expansion. Merchants can also reduce complexity by accepting multiple card types and payment brands through a single connection. It also helps optimize payments performance, marketing efforts, and loyalty programs based on transaction data insights to help retailers enhance their customers’ experience.

**What it delivers**

- **Efficiency.** Speed up transaction processing and manage costs by eliminating the need for multiple endpoints.
- **Flexibility.** Process multiple card types, including debit, credit, PIN, and chip cards, private label, gift, loyalty, and fleet brands through a single infrastructure.
- **Insight.** Gain intelligence about your payments processing and your customers to enable highly targeted loyalty marketing programs.
- **Security.** Trust solid redundancy and powerful fraud protection to keep your data and your network safe.
- **Innovation.** Implement new technologies more quickly.

**How it works**

![Diagram showing the process of Merchant Direct Exchange between Merchant, VisaNet, Acquirer, and Issuer](image-url)
GATEWAY SERVICES

MANY PAYMENT TYPES, ONE CONNECTION

What it does
Visa Gateway Services enables acquirers and merchants using Merchant Direct Exchange (MDEX) to process multiple payment brands and payment types through a single connection.

What it delivers
- **Flexibility.** Process a variety of payment brands, including Visa, MasterCard, American Express, Discover, and others, as well as various payment types, including PIN, debit ATM, and credit cards.
- **Efficiency.** Simplify compliance and integration with other networks, and eliminate hardware and maintenance overhead of separate connections.
- **Confidence.** Visa Gateway Services has been in use for more than 20 years by major companies.

How it works

![Diagram of Gateway Services](image-url)
EXPAND MERCHANT REACH ONLINE

What it does
The CyberSource Payment Management Platform provides a direct connection to VisaNet and a variety of payment management services including acceptance, fraud management, analytics, and developer services. Using CyberSource, merchants can sell online almost anywhere in the world, accept a variety of payment types, and automate fraud management for bottom-line benefit.

What it delivers
• Reach. CyberSource makes selling on a global scale easier and more efficient.
• Efficiency. Reduce processing costs, streamline fraud management, and minimize risk exposure through a single connection.
• Protection. CyberSource helps you simplify PCI DSS compliance and reduces the risk of stolen or compromised card data.
• Flexibility. Accept payment types preferred in local markets and fund in 21 currencies.
VISA ACCELERATED CONNECTIONS PLATFORM

FAST ACCESS TO PAYMENT INNOVATION

What it does
The Visa Accelerated Connections Platform helps acquirers and merchants fast track adoption of the latest payment solutions and programs thanks to direct access to Visa infrastructure and investments. From integration to rollout, the Visa Accelerated Connections Platform delivers the front- and back-end support that simplifies introducing payment advances.

What it delivers
• **Efficiency.** Rapidly deploy using existing POS technology to support real time offer redemption, point-to-point encryption and tokenization, and in POS solutions.
• **Access.** Support activation of innovative solutions with a simple connection to the Visa payment network using the flexible XML API.
• **Value.** Accelerate revenue and reduce costs for added bottom-line benefit.

VISA INTEGRATED REDEMPTION PLATFORM

ENABLE FAST OFFER REDEMPTION AT THE POINT OF SALE

What it does
The Visa Integrated Redemption Platform provides issuers, merchants, loyalty providers, and acquirers a tool for enabling the redemption of offers, rewards, discounts, deals, and loyalty at the point of sale. The program is designed to streamline and simplify the process, and may offer expanded value-added benefits as the program evolves.

What it delivers
• **Convenience.** Offer easy redemption by automatically fulfilling discounts linked to enrolled Visa cards without the need to manage coupons, codes, or statement credits.
• **Opportunity.** Increase redemption rates with a simple, more convenient shopping experience and send triggers to drive behavior.
• **Efficiency.** Apply discounts automatically at checkout for instant gratification for customers. Discount information is printed on the receipt.
• **Insight.** Track results and measure performance of the offer and loyalty programs with consolidated reporting tracked throughout the redemption.

What the Experts Say
“The offer landscape is evolving and highly fragmented, so the merchant really needs a partner that can pull it all together in a simple solution. Providing offer redemption services at the point of sale gives acquirers the springboard they need to transform their relationships with merchants, and offer a solution that actually helps build their businesses.”

Rick Oglesby
Senior Analyst
Aite Group
VISA DATA SECURE

NETWORK-LEVEL ENCRYPTION AND TOKENIZATION

What it does

Visa Data Secure provides point-to-point encryption between the POS terminal and the endpoint, safeguarding data in flight and at rest. It uses state-of-the-art security protocols to protect data without impacting the ability to track sales data.

What it delivers

• **Protection.** Visa Data Secure encrypts consumer data at every point of the transaction, reducing exposure risks for merchants.

• **Compatibility.** Visa Data Secure complements EMV chip authentication technology, which authenticates the card, but doesn't protect PAN or other data.

• **Flexibility.** Works with all major card brands.

What the Experts Say

“This is a war between the bad guys and the good guys, between the fraudsters and the financial institutions. The optimal solution is to have data encrypted or tokenized from the point of sale all the way up to the network so it can then be transmitted seamlessly and securely.”

*Julie Conroy*
*Research Director*
*Aite Group*
Payment Channel Advances

VisaNet plays a critical role in enabling participants to take full advantage of Visa’s ongoing payments innovations and advances. Our objective is to enhance consumer convenience and expand payment and shopping options while maintaining reliability, trust, and security.

E-COMMERCE

DELIVERING ON THE DIGITAL OPPORTUNITY

What it does

With VisaNet-enabled e-commerce solutions, it’s easy for local businesses to expand their reach. Today, business can be done anywhere, anytime, and via a variety of payment channels. VisaNet’s innovative, cross-channel services help businesses make it happen.

And a variety of VisaNet features are available to help secure e-commerce transactions:

• **Verified by Visa.** Three-domain (3-D) secure protocol enables cardholders to authenticate their identity with convenient password protection.

• **CVV2.** Provides e-commerce merchants a solution for authenticating the card when it is not physically available to them.

• **Address verification.** Provides additional security by confirming address data supplied by the purchaser matches known billing address for the cardholder.

• **Visa Checkout.** Visa’s digital wallet simplifies checkout and reduces cart abandonment by offering a convenient solution for managing payment and shipping information.

What it delivers

• **Growth.** More business can get done in more ways, anytime, anywhere in the world with VisaNet solutions.

• **Convenience.** E-commerce enables more people more access to a broader range of goods and is made easier and more secure with Visa’s e-commerce solutions.

• **Confidence.** Around the corner or around the world, VisaNet helps ensure transactions will be efficient and secure.
VISA CHECKOUT

MOBILE AND ONLINE CHECKOUT MADE SIMPLE, FAST, AND SECURE

What it does
Visa Checkout offers cardholders a simple, fast, and secure way to pay, whether they’re on a laptop, tablet, or mobile phone. Customers sign in to their Visa Checkout account using only their email and password. They can quickly and securely check out on any device, when and where they want. Any major credit or debit card can be used with Visa Checkout. Add just one card, multiple cards, or all your cards — it’s up to you! Rest assured, Visa Checkout stores your payment and personal information behind multiple layers of security.

What it delivers
• **Convenience.** Simplifies shopping by reducing steps — only two fields to fill instead of 30 — for fast, easy checkout, and eliminates need to re-enter and store information on multiple merchant sites.
• **Security.** Safeguards card data and is backed by Visa’s multiple layers of security.
• **Flexibility.** Manage settings, maintain shipping information, and add multiple cards. Plus, cardholders continue to earn rewards on their cards as they always do.
• **Integrity.** Increases confidence in using your card for digital payments because it comes from you and Visa.
VISA DIRECT

MONEY TRANSFERS MADE EASY

What it does
Visa Direct enables cardholders to transfer funds to individuals, whether to pay for services, send money home, give gifts, or split the lunch bill. Cardholders can send remittances from any source — a bank, a card, or cash — to another eligible cardholder. The funds are credited to the recipient’s Visa account and can be spent directly from their card or withdrawn as cash.

What it delivers
- **Convenience.** Funds are available quickly and can be used anywhere Visa is accepted, including ATMs.
- **Efficiency.** Cardholders can avoid the hassle and expense associated with traditional money transfer agents.
- **Flexibility.** Send funds from any source through a variety of channels.

Traditional Purchases

- Paying household help
- Splitting expenses
- Gifting money
- Remittances
- Prepaid top up
- Account transfers
- Disbursements
- Rebates
VISA PAYWAVE

STREAMLINED PAYMENT AND CONVENIENCE

What it does
Visa payWave enables payment at the point of sale with a simple wave of a card or mobile device — no swiping required. Visa's contactless technology quickly and securely conveys account and other payment information directly to the terminal, offering the speed and immediacy that consumers and businesses expect. For small-ticket items, just wave your card and go — there is no need for a signature or PIN.

What it delivers
• **Convenience.** Customers can breeze through checkout without handing over their card or swiping it in the terminal.
• **Innovation.** Visa payWave transforms a mobile phone into a payment device using Near Field Communication (NFC) technology.
• **Efficiency.** Consumers can enjoy faster transactions since they don't have to fumble for cash.
• **Security.** Cardholders remain in control of their cards during a transaction and advanced encryption reduces fraud risk.

WHITE LABEL PROCESSING

BUILD YOUR BRAND

What it does
Visa White Label Processing enables the use of the VisaNet network as the foundation for your own branded service offerings. Companies, financial institutions, and governments can deliver the performance, convenience, and security of VisaNet, all with their own look and feel.

What it delivers
• **Rapid Deployment.** Save the time and cost of designing, building, and maintaining your own network or investing in new point of sale (POS) equipment.
• **Innovation.** Get the benefit of VisaNet’s continued investment in innovation to ensure customers enjoy the most up-to-date technology and service.
• **Security.** White Label customers can offer VisaNet’s industry-leading fraud prevention to their users.
• **Flexibility.** Our solution can be configured to meet your unique needs — whether that means accepting specific payment types, enabling multi-function cards for payments and identification, or supporting the launch of a new national payment brand.
• **Support.** VisaNet offers world-class business management processes and expertise to support white label solutions.

A Country-wide Solution

EasyCash, Cambodia’s domestic ATM network uses VisaNet White Label Processing for all of its inter-bank ATM transactions. This solution involves seven bank partners and 270 ATMs. As transaction volumes continue to increase, interest in joining the network has steadily grown.
MOBILE INNOVATION

ENABLING INCLUSION, PURSUING PROGRESS

What it does
Mobile technology is fast becoming the single most important driver of financial inclusion and economic advancement and Visa is playing an important role. Our Mobile Prepaid program and Mobile Point of Sale support give consumers, merchants, and other organizations the tools they need to use and accept this growing payment option. From enabling secure, over-the-air loading and management of payment credentials, to expanding the reach of mobile money to the full range of Visa network merchants, ATMs, and other Visa account holders, to enabling mobile devices to be used for card acceptance, Visa is at the forefront of mobile money.

What it delivers
• **Convenience.** Consumers increasingly expect simplicity of paying with their mobile device. VisaNet mobile innovations make that possible with single point interconnectivity, easy technical integration, and seamless support.
• **Access.** Our mobile innovations expand the reach of mobile money solutions to connect consumers to the extensive network of Visa accepting merchants, bringing the unbanked and underbanked into the general economy.
• **Security.** With the move to mobile, securing data is a critical consideration. We build upon proven expertise to protect sensitive financial data.
• **Savings.** The ubiquity of mobile infrastructure combined with our turnkey solutions adds up to cost efficiencies.
• **Simplicity.** By tapping into VisaNet mobile innovations, merchants and other organizations can minimize the need for additional infrastructure.
Toolkits & Support

Working with VisaNet, you have access to an array of resources and support to ensure your experience is outstanding.

**VISANET TESTING & CERTIFICATION**

**RESOLVE PRODUCTION ISSUES BEFORE THEY OCCUR**

*What it does*

With a client accessible, production-mirroring environment and self-service tools, VisaNet Testing & Certification enables endpoints to test and certify software applications, transaction formats, and data transmissions for all Visa Integrated Payment System and BASE II activities. This offers a convenient, reliable way to verify system integrity prior to connecting to the Visa production environment.

*What it delivers*

- **Confidence.** By supporting lifecycle testing for each environment and between environments, VisaNet Testing & Certification can help minimize errors and reduce the risk of endpoint, cardholder, or financial impacts.
- **Flexibility.** Use the test environment or our self-service tools to verify your solutions. This can include customization based on transaction parameters, conditions, or other situational variables.
- **Independence.** With the ability to customize and perform unattended testing on your own schedule, VisaNet Testing & Certification minimizes the need to coordinate with Visa.
VISA DEVELOPER PROGRAM

TOOLS AND TECHNOLOGY TO BUILD THE FUTURE

The Visa Developer Program provides a range of tools and resources to help developers tailor VisaNet services for various applications. Resources include:

- SDKs
- APIs
- Application and use case showcases
- Libraries
- Developer communities

What it delivers

- **Access.** Payment technology providers now have direct access to the innovative and powerful capabilities of the Visa network.
- **Ease-of-use.** Implement fast, simple, secure checkout into a website or app for your business.
- **Flexibility.** Create innovative payment programs for financial institutions and their payment providers by letting customers send money directly to other Visa accounts.
- **Mobility.** Quickly build contactless mobile payment apps for financial institutions, MNOs, OEMs, or third-party wallet providers.

GLOBAL VISA ONLINE

DELIVERING ALL THE RESOURCES YOU NEED

What it does

Global Visa Online is a consolidated extranet that provides access to information and tools to help you succeed with VisaNet across a variety of areas, including:

- Portfolio management
- Marketing
- Risk management
- Product development
- Processing
- Fraud
- Dispute resolution
- Operations

What it delivers

- **Convenience.** All the tools and services you need in one place.
- **Support.** Learn best practices and stay current with the latest information from Visa.
- **Community.** Share knowledge and benefit from the experience of others.
VisaNet services can be configured to provide the transparency, control, and autonomy domestic and regional economies need to succeed, while giving businesses and institutions the freedom to innovate and thrive.
VisaNet Transaction Processing solutions provide proven, dependable core payment capabilities along with value-added services that improve security and enhance convenience. With a flexible array of services to choose from, you can configure how you use the network to achieve the level of control, reliability, and risk management that’s right for your situation. Our Transaction Processing solutions include:

**Scalable Processing** — Process, clear, and settle electronic payments efficiently and reliably.

- 18 Authorization
- 19 Clearing
- 20 Settlement
- 21 National Net Settlement
- 21 Area Net Settlement
- 22 VisaNet Edit Package

**Control & Transparency** — Gain clear visibility into your payments processing and services to help improve performance.

- 23 On Behalf Of Services for Routing
- 24 Selective Acceptance
- 25 Payment Controls
- 26 Partial Authorization
- 27 Pre-Authorized Payment Cancellation Service (PPCS)
- 27 Account Level Processing
- 28 Merchant Central File System (MCFS)

**Risk Management** — Reduce waste, fraud, and misuse with state-of-the-art risk management solutions.

- 30 Visa Advanced Authorization
- 31 Visa Risk Manager
- 32 Visa Strategy Manager
- 32 Exception File/Automatic Cardholder Database Service
- 33 Alerts/Notifications

**Reliability** — Maintain high availability with performance monitoring and remote capabilities.

- 34 Stand-In Processing (STIP)
- 35 Processing Monitor

**Security** — Protect merchant and consumer data in any kind of transaction.

- 36 On Behalf Of Authorization (OBO Authentication)
- 37 Core Authentication Services
- 38 Visa Network Token Service
- 38 Visa Cardholder Authentication Service (VCAS)
- 39 Dynamic Key Exchange
- 39 Visa Interactive Mobile Alerts
- 40 Verified by Visa
- 41 Visa Smart Debit/Credit (VSDC) Chip
Scalable Processing

VisaNet offers an array of services to help optimize payment processing for organizations and entities of all sizes.

AUTHORIZATION

FAST AND RELIABLE ONLINE PAYMENT PROCESSING

What it does

Authorization provides real time approval and decline decisioning for payment transactions. It can support a wide range of options. For example, to improve availability, issuers can establish conditions when VisaNet can provide authorization on their behalf. Or, merchants can verify the validity of accounts before initiating an actual payment transaction. VisaNet authorization services can be configured to meet the speed and efficiency requirements of your business while controlling risk and maintaining security.

What it delivers

- **Performance.** VisaNet supports high transaction authorization volumes with high availability, processing each request in less than one second.
- **Flexibility.** One integrated system handles both full financial and dual message authorizations globally, with support for all major card brands via our network gateways.
- **Reliability.** Synchronized data centers with full back-up redundancy ensure that VisaNet is available to provide authorization processing at all times.

How it works

VisaNet integrates the tools and analytics to enable intelligent, informed transaction decisions.

VisaNet provides domestic and international processing of credit, debit, prepaid, and commercial payment products to nations in every corner of the world.
CLEARING

FLEXIBLE AND DEPENDABLE FINANCIAL PRESENTMENT

What it does

VisaNet Clearing services facilitate the exchange of financial information related to transactions. VisaNet makes the collection and transmission of transaction information possible. This process includes valuing the transaction, calculating fees, and forwarding to endpoints for processing.

What it delivers

- **Experience.** VisaNet is a trusted global provider with decades of proven clearing capability, including domestic processing in more than 100 countries.
- **Reliability.** Clearing must be accurate and timely to maintain network integrity.
- **Flexibility.** VisaNet provides transaction processing in 200 countries and territories and supports 180 currencies. It also offers a variety of services including flexible routing and interchange valuation.

How it works

In the world of electronic payments processing, there are two basic payment processing models: Dual Message and Full Financial. VisaNet accommodates both models and provides translation between them, enabling interoperability between all participants, regardless of the processing model they use.

**Dual Message model,** formerly known as BASE I/BASE II, involves sending two separate messages for each payment. The first message is sent in real time to obtain authorization. The second message is used to clear the transaction, typically by batch clearing process. This format has wide legacy acceptance and is commonly used for retail payments.

**Full Financial or Single Message System model,** also known as SMS, enables authorization and clearing to take place with a single message. Full financial messages contain all the information needed to authorize and clear, and can be used to reduce risk and uncertainty related to delays of batch clearing.

Payment Processing Flexibility
## SETTLEMENT

### STREAMLINED SETTLEMENT PROCESSING

**What it does**

VisaNet Settlement Service (VSS) delivers the calculation and reporting of net financial positions of cleared transactions for each settlement participant. Settlement information is provided through customized reports tailored to each organization’s domestic, regional, and global needs.

**What it delivers**

- **Flexibility.** Clients have the ability to define their settlement relationships to fit the needs of their business, and reporting frequency and format can be designated, as well.
- **Efficiency.** Using a single, centralized service streamlines reporting and funds transfers.

**How it works**

1. **Base II and Single Message System (SMS) perform clearing and valuation on transactions.**
2. **Cleared transactions are sent from Base II and Single Message System to VisaNet Settlement Service.**
3. **VisaNet Settlement Service calculates settlement totals and produces settlement reports according to the issuer’s, acquirer’s, or processor’s specification.**
4. **The settlement reports are sent to the issuer, acquirer, or processor in the formats they have designated.**

VisaNet provides domestic processing in more than 100 countries.
NATIONAL NET SETTLEMENT

A DOMESTIC SOLUTION CUSTOMIZED TO YOUR NEEDS

What it does
National Net Settlement enables countries to process, clear, report, and settle electronic payment transactions within their own borders based on local processing windows, in local currency. Built on the VisaNet infrastructure and using a local settlement agent agreed on by all parties to administer and facilitate funds transfer, National Net Settlement combines the reliability and efficiency of the VisaNet system with the visibility and control required for domestic transparency.

What it delivers
• **Control and compliance.** Gain greater transparency into domestic economic data and transactions and customize the service to maintain compliance with central bank guidelines and other regulatory issues.
• **Growth.** Use an electronic payments network to help drive GDP and promote economic development.
• **Cost efficiency.** Avoid the high up-front cost of building new systems from scratch. With National Net Settlement, there are no direct implementation costs to create a reliable system.
• **Scalability.** Easily scale from local to national to global when you’re ready.
• **Convenience.** Enjoy a single interface for all transactions, domestic or international.
• **Experience.** Count on one of the largest, most robust payments systems in the world.

AREA NET SETTLEMENT

A SOLUTION FOR REGIONAL PAYMENT SUCCESS

What it does
VisaNet Area Net Settlement delivers the same processing, clearing, reporting, and settlement of electronic payment transactions as National Net Settlement, but on a regional basis. It enables countries with close economic ties to work together using a common currency, a regional settlement agent, and a common set of principles and regulations. Area Net Settlement brings all the benefits of National Net Settlement, but with regional economies of scale and processing benefits.

What it delivers
• **Growth.** Use an electronic payments network to help drive regional GDP and promote economic development.
• **Cost efficiency.** Avoid the high up-front cost of building new systems from scratch. There are no direct implementation costs to create a reliable system.
• **Scalability.** Easily scale from regional to global when you’re ready.
• **Convenience.** Enjoy a single interface for all transactions, domestic or international.
• **Experience.** Count on one of the largest, most robust payments systems in the world.

Half the countries in Latin America and Asia use VisaNet domestic networks.
VISANET EDIT PACKAGE

STREAMLINING PREPARATION FOR OPTIMAL INTEGRITY

What it does
To simplify preparation of daily file packages for delivery to Visa, VisaNet Edit Package offers a turnkey solution that validates, formats, and creates outgoing transaction data, and verifies the integrity of incoming transaction data while creating an audit trail and error reports. This four-module solution is compatible with various computer systems and makes it easy to conform to Visa requirements with minimal impact to existing infrastructure.

What it delivers
• Cost effectiveness. Comply with Visa requirements without having to change existing systems.
• Integrity. Optimize the quality of transaction data and information delivered to Visa.
• Efficiency. Identify and correct errors prior to submission.
The Power of Selective Routing
With electronic payments, there are many kinds of data that are transmitted for each transaction, including financial data, non-financial data, settlement data, interchange data, and more. By choosing processing centers based on the kind of transactions or the types of data involved, or splitting data into separate files for separate routing, both issuers and acquirers can significantly increase efficiency.

Control & Transparency

One of the key advantages of electronic payments is the added visibility and data insights that they enable. This, combined with greater control, delivers measurable advantage and opportunities for bottom-line improvement.

ON BEHALF OF SERVICES FOR ROUTING

SIMPLIFY AND SPEED PROCESSING WITH INTELLIGENT ROUTING

What it does
Processing payments ranging from credit and debit to PIN debit, ATM, and others is complex. Visa On Behalf Of Services for Routing enables acquirers and issuers to reduce processing complexity and increase approval rates by setting parameters that affect how various kinds of transactions are routed.

• Basic Routing enables you to route transactions based on the card range or the forwarding institution.
• Alternate Routing allows transactions to be sent to different processing centers depending on specific needs.
• PIN Routing chooses separate routing for transactions requiring PIN verification.
• POS PIN Routing transmits all point of sale transactions requiring PIN verification to a processing center using SMS, and all other transactions on the BASE I system.
• ATM/POS Routing separates out ATM transactions from POS transactions and routes them differently.
• Priority Routing enables gateway clients to set network selection for transactions eligible for multiple networks.

What it delivers
• Efficiency. All parties can process transactions more quickly when they are routed to specialized processing centers.
• Flexibility. Issuers and acquirers can specify which processing centers should receive which kinds of transactions and card types, and change preferences to suit their evolving needs.
SELECTIVE ACCEPTANCE

MANAGE HOW AND WHERE YOUR CARDS ARE ACCEPTED

What it does

Selective Acceptance gives issuers portfolio-level controls over which transactions they receive from VisaNet. Transactions that do not meet their predefined criteria are declined by the network. These can include:

• **Transaction type.** Approve or reject transactions based on whether they are cash, quasi-cash, credit, or another option.

• **Payment channel.** Restrict acceptance based on whether the transaction is carried out face-to-face, via e-commerce, or in a card-not-present environment.

• **Merchant category code/group.** Limit approvals based on the merchant’s business or industry using industry-standard codes.

• **Card acceptor/terminal identifier.** Approve or reject transactions based on an assigned value that represents a merchant, location, or terminal.

• **Transaction jurisdiction.** Establish regions or countries where transactions can take place.

• **Merchant verification value.** Restrict acceptance based on a Visa-controlled value associated with a specific merchant.

What it delivers

• **Control.** Create your own acceptance criteria based on your unique situation and considerations.

• **Flexibility.** Adjust acceptance criteria as needs evolve.

• **Optimization.** Make the most of available bandwidth and capacity by restricting acceptance of certain transactions automatically.
PAYMENT CONTROLS

EMPOWER ACCOUNT OWNERS WITH CARD USAGE CONTROLS

What it does
Payment Controls gives businesses or individuals the power to limit when, where, and how specific cards are used, improving security and preventing fraud, waste, and misuse. Blocks can include spending limitations such as date and time or purchase limits, location restrictions, and category controls such as type of merchant. Parameters can be modified as needs change.

What it delivers
- **Security.** Reduce the risk of fraud, waste, and misuse by blocking authorizations for transactions that are outside the scope of the card’s intended use.
- **Convenience.** Account blocks are easy to put in place and provide broad protection.
- **Flexibility.** Authorization blocks can be changed as needs or responsibilities change.

How it works

**Spending Controls**
- Day and time blocks, such as only during business hours or during the business week.
- Spending restrictions, including no cash back on purchases or a maximum dollar limit for individual purchases.

**Location Controls**
- International controls, limiting card use to certain countries.
- Domestic limits restrict use to a specific country.

**Category Controls**
- Merchant restrictions, so that a card can only be used with certain kinds of merchants.
- Transaction type controls, defining if a card can be used or not used for purchase or ATM.
- Channel controls, so that a card cannot be used for e-commerce, for example.
PARTIAL AUTHORIZATION

TRANSFORM DECLINES INTO APPROVALS

What it does

Partial Authorization provides an alternative to a declined transaction when the available account balance is not sufficient to approve a transaction in full. An approval for a portion of the original requested amount enables the remainder to be paid using another card or cash.

What it delivers

• Convenience. Consumers can get full use of their funds or available credit.
• Flexibility. Merchants can maximize sales by letting consumers pay the way they want.
• Simplicity. Partial Authorization handles all aspects of the transaction in the background, letting merchants know exactly how much of another payment method will be needed.

How it works

Cardholder

Merchant

Acquirer

Issuer

Authorization Request ($100)

Authorization Response ($75)

Authorization Request ($100)

Authorization Response ($75)
PRE-AUTHORIZED PAYMENT CANCELLATION SERVICE (PPCS)

STREAMLINE STOP-PAYMENT PROCESSING

What it does
Recurring transactions and automatic bill payment offer great convenience for consumers and steady cash flow for merchants. However, in some instances, unauthorized transactions can occur. Pre-Authorized Payment Cancellation Service (PPCS) enables the issuer to place a proactive stop-payment against unauthorized, recurring transactions.

What it delivers
- **For issuers.** Eliminates chargeback expense caused by merchant mishandling of bill pay cancellation and minimizes stop-payment calls and reduced closed-account losses.
- **For cardholders/issuers.** Customers are more satisfied when they have greater control over their transactions, and gain confidence in recurring and automatic payment mechanisms.
- **For merchants.** Merchants are able to provide a better customer experience and reduce chargebacks. Operational costs are reduced for all stakeholders.

ACCOUNT LEVEL PROCESSING

OFFERING A CARD ACCOUNT NUMBER FOR LIFE

What it does
As a cardholder’s life changes, the features they need from their card evolve, as well. In the past, upgrading customers to a new card offering has resulted in disruption, which poses a retention risk. Account Level Processing (ALP) solves this problem by assigning cardholders a single account number that remains the same, even as the underlying card products change. With ALP, issuers enjoy the ability to offer their customers different levels of card benefits, while cardholders get the consistent experience of a single identity in the system.

What it delivers
- **Continuity.** Issuers can upgrade or downgrade the products they provide without changing the cardholder’s account number.
- **Convenience.** Customers can enjoy new benefits and expanded opportunities more easily.
- **Loyalty.** Issuers avoid attrition that naturally occurs when cards are reissued due to a card number change.
MERCHANT CENTRAL FILE SERVICE (MCFS)

AUGMENT TRANSACTION DATA

What it does

Merchant Central File Service (MCFS) enables merchants and acquirers to use VisaNet to store, augment, and replace authorization, financial, and reversal data contained in their transactions. This can help reduce the expense of terminal changes or replacements as transaction message formats evolve over time.

What it delivers

• Future-proofing. MCFS reduces the impact of device limitations and data requirement changes which allows merchants to continue using existing POS equipment.
• Flexibility. Each merchant ID or merchant terminal ID can support multiple card types.
• Convenience. Acquirers can submit updates online through a VisaNet connection.

How it works
Risk Management

One of the key advantages VisaNet delivers is the insight, expertise, and experience to help reduce the risk of fraudulent transactions. By capitalizing on Visa’s powerful fraud tools, you have the opportunity to control costs and minimize misuse.
VISA ADVANCED AUTHORIZATION

STOP FRAUD BEFORE IT HAPPENS

What it does

Visa Advanced Authorization is a powerful network processing tool that helps prevent fraud before it happens. By analyzing network and individual usage patterns and identifying transactions that don’t fit that pattern, Advanced Authorization facilitates automatic decisioning at the point of sale.

Visa Advanced Authorization includes three key components:

• **A Risk Score** that evaluates each transaction to indicate the degree of fraud risk.

• **The Compromised Account Risk Condition Code** provides information about high-risk compromise events.

• **A Compromised Event Reference (CER) ID** indicates accounts associated with a specific compromise event.

What it delivers

• **Security.** Advanced Authorization has been proven to reduce fraud.

• **Efficiency.** By automating approval, queuing, and declines, Advanced Authorization improves throughput and risk management.

• **Growth.** Less fraud means more trust, and that means more card usage overall.

How it works

VisaNet Authorization Message Stream

- **Acquirer**
- **Issuer**
- **Advanced Authorization**
- **Merchant**
- **Compromised Accounts from Compromised Accounts Management System (CAMS)**

- **In-flight Scoring Engine**
- **Visa Global Profiles**

- **Neural Networks and Statistical Models**
- **100% Visa Global Transaction History**
- **Confirmed Fraud Data**
- **Rare Event Detection (RED)**
- **24x7 High-Risk**
VISA RISK MANAGER

CONVERT INSIGHT TO ACTION

What it does

The data collected through VisaNet makes it possible to deliver unprecedented risk insights. Visa Risk Manager turns that insight into action to dynamically respond to fraud before it occurs. These web-based tools enable you to establish and manage rules for fraud based on your own tolerance for risk. Using Visa Risk Manager, you can create and test decisioning rules to determine the impact before they are enacted. Plus, rules can be modified and activated at any time.

What it delivers

- **Flexibility.** Use the service as a stand-alone tool or integrate it into existing systems.
- **Customization.** Set and manage the rules for predicting fraud according to your unique and evolving needs.
- **Speed.** Create, test, and activate rules within seconds.
- **Action.** Real time decisioning efficiently declines high-risk transactions at the point of sale.
- **Efficiency.** Transactions requiring additional oversight can be queued for streamlined offline review.
- **Savings.** By automating fraud detection, you have the opportunity to free up valuable resources for other tasks.

CASE STUDY

The Power of Real Time Fraud Detection and Prevention

Challenge: A Visa client bank was facing increasing fraud costs. While they had rules in place to identify fraudulent transactions, they were not based on real time data, and didn’t reflect data about compromised accounts. It also didn’t keep track of false positives generated by their rules — transactions that should have gone through.

Solution: By implementing Visa Advanced Authorization and Visa Risk Manager, the bank was able to develop real time fraud mitigation strategies. Risk Manager gave them greater flexibility in creating and adapting rules, using more than 30 variables as criteria. In addition, they began examining their false positive rates to refine rules and increase approval of safe transactions.

Result: The bank was able to reduce losses from fraud and identify compromised accounts while simultaneously reducing false positive declines.
VISA STRATEGY MANAGER

FIND THE RIGHT RISK RULES

What it does
Sophisticated analytics can help you get the most out of Visa Advanced Authorization and Visa Risk Manager. Visa Strategy Manager is a VisaNet consultative service that puts those analytics and Visa expertise right at your fingertips. Customized to your needs, and with no need to invest in technology, Strategy Manager can help you optimize authorization by automating rule suggestions.

What it delivers
• **Throughput.** Drive growth by optimizing approval ratings and minimizing risk.
• **Risk management.** Improve performance by pinpointing complex fraud patterns before they impact your bottom line.
• **Efficiency.** Automate rules authoring and reduce false positives to drive business results.
• **Insight.** Implement rules strategies based on historical transaction data.
• **Savings.** Visa Strategy Manager’s insights easily scale across product lines allowing expanded protection without additional staffing expense.

EXCEPTION FILE/AUTOMATIC CARDHOLDER DATABASE SERVICE

UP-TO-DATE FRAUD PREVENTION

What it does
The VisaNet Exception File offers efficient tracking of lost, stolen, or compromised cards. This information is used to respond to authorization requests to prevent use of a compromised card. Issuers have the option to report lost, stolen, or compromised cards themselves or to enroll in the auto Cardholder Database (CDB) Service. This service allows VisaNet to automatically lists cards in the exception file as soon as they are declined with a lost or stolen response code.

What it delivers
• **Fraud prevention.** Tracking lost or stolen cards helps prevent losses from fraudulent activity and improves accuracy of cardholder information.
• **Convenience.** By automating inclusion, the CDB improves tracking and reduces risk of data not being reported.
ALERTS/NOTIFICATIONS

REAL TIME INFORMATION FOR INCREASED CONTROL

What it does

The Alerts/Notification service transforms data into valuable alert notification information based on the criteria cardholders have identified as important to them. Cardholders of participating issuers can choose to receive near real time alerts via email or on their mobile device about:

- Where their card was used and on what transactions
- How much was spent
- What types of merchants it was used at
- International and ATM usage
- Recurring payments

Your Visa card was used at merchant X in San Francisco, CA US for $55.55

Transaction alerts provide relevant, timely information for improved monitoring and early fraud detection.

You have reached your weekly limit of $100 for supermarket purchases

Mobile delivery of transaction summaries helps cardholders effectively manage spending.

What it delivers

- **Fraud reduction.** Cardholders can quickly identify if their card has been used without their knowledge.
- **Spend management.** This insight makes it easier to manage spending by day, week, month, or in specific categories.
- **Connection.** Regular communications that deliver measurable value strengthen cardholder relationships and build loyalty.
Reliability

Consumers and businesses count on the convenience of using their cards. VisaNet offers a number of services to help ensure your systems are always available.

STAND-IN PROCESSING (STIP)

VISANET HAS YOUR AUTHORIZATION COVERED

What it does

Stand-In Processing (STIP) enables issuers to continue processing transactions even when their systems are unavailable, whether due to maintenance, outage, overload, or disaster. Issuers set their authorization parameters in advance to define what transactions VisaNet should and should not approve. When issuer systems go down or slow down, STIP kicks in and uses those parameters to evaluate transactions until systems are back online.

What it delivers

• Continuity. STIP enables business to continue and keeps customers happy.
• Risk management. By setting the authorization parameters, issuers can control how much risk they want to take, and adjust those parameters as their needs change.
• Flexibility. STIP enables issuers to attend to maintenance or other needs without impacting service.

How it works

Positive Cardholder Authorization Services (PCAS) lets issuers establish transaction limits and configure other parameters that enable VisaNet to make authorization decisions on their behalf. For example, an issuer might permit purchases up to a certain dollar amount and below a certain risk level to be automatically authorized.

Positive Authorization Capacity Management (PACM) helps issuers optimize their processing capacity while ensuring outstanding service. With PACM, issuers can establish transaction thresholds where VisaNet can take over some or all authorization decisions for increased efficiency.
PROCESSING MONITOR

GET VISIBILITY INTO YOUR PROCESSING PERFORMANCE

What it does
Processing Monitor allows merchants, issuers, acquirers, and their processors to get a clear picture of processing system performance. Think of it as a medical exam for the health of your processing system. Processing Monitor delivers:

- Detailed metrics about transaction processing, so that issues can be identified and resolved.
- Customized analytics that deliver exactly the data you’re looking for, based on business parameters you determine.
- Near real time notifications of events.

What it delivers

- Performance. Identify factors that impact transaction processing to enable prompt resolution.
- Speed. Get real time access to important transaction processing information.
- Insights. Gain greater understanding of your business and optimization opportunities.
Security

Protecting our customers is at the heart of everything that Visa does. With VisaNet, you have an array of services to help keep your data and your systems safe.

ON BEHALF OF AUTHENTICATION (OBO AUTHENTICATION)

REDUCE PROCESSING WORKLOAD AND COMPLEXITY

What it does

This optional service enables VisaNet to authenticate the card and cardholder to support traditional retail and card-not-present transactions on an issuer’s behalf. Authentication elements can include chip, PIN, CVV, address, Verified by Visa, and CVV2. This service can be used for Visa and Plus ATM transactions, Visa point of service (POS), Visa POS Electron, Interlink POS transactions, and Visa Smart Debit/Smart Credit (VSDC) transactions.

What it delivers

• Simplicity. OBO Authentication uses VisaNet resources to reduce workload and minimize complexity.

• Flexibility. These services can be provided full-time or on a stand-in basis.

• Security. VisaNet can check to prevent trial-and-error entry of a PIN.
CORE AUTHENTICATION SERVICES

AUTHENTICATE USERS AND VERIFY TRANSACTIONS

What they do

VisaNet’s Core Authentication Services gives merchants a range of solutions and technologies to authenticate card users and verify transactions in a continually changing landscape of electronic payments and evolving fraud strategies.

- **Cardholder Verification Value (CVV)** helps reduce losses from alteration or counterfeiting of physical cards by embedding a special code known only to the issuer and Visa in each card’s magnetic stripe. When the card is used at the point of sale, the code is verified, and if it isn’t correct, the transaction is declined.

- **Cardholder Verification Value 2 (CVV2)** is a three-digit code printed on the back of the card to provide additional security during transactions when the card is not present. Fraud perpetrators who’ve come by the credit card number illegally will not have the physical card, and won’t be able to provide this number.

- **Personal Identification Number (PIN)** provides an additional level of security by authenticating the cardholder as well as the card or device.

Cardholder Authentication

- Signature/No Signature Required
- PIN
- Address Verification
- Verified by Visa
- Consumer Authentication Service

Card/Device Authentication

- Cardholder Verification Value (CVV)
- Dynamic Card Verification Value (dCVV)
- Card Verification Value 2 (CVV2)
- Chip / VSDC

Depending on the underlying product and acceptance environment, one or more authentication methods may be utilized to authenticate the card/device and/or cardholder.

- **Dynamic CVV (dCVV)** provides additional security for contactless payments and embedded-chip transactions. It generates a unique code for each transaction so that if data from a transaction is captured by a counterfeiter, the account will remain safe.

- **Address Verification Service (AVS)** provides security during transactions via e-commerce, mail, phone, or in retail transactions where card data is typed in. The merchant verifies the billing address of the cardholder with VisaNet or the issuer. Because a counterfeiter is unlikely to have this information, fraudulent transactions can be prevented.

- **Visa Smart Debit/Credit (VSDC) Chip** is a small chip embedded in a card that conveys account information securely to the terminal wirelessly or by contact.
VISA NETWORK TOKEN SERVICE

PROVIDING PROTECTION FOR ACCOUNT NUMBER INFORMATION

What it does
The Visa Network Token Service offers on-behalf-of (OBO) issuance and provisioning of payment tokens to replace account numbers in the transaction processing flow. The service includes payment token generation, provisioning, processing, and lifecycle management at the payment network level. It enables tokens for limited use and specific domains only (e.g., specific channel or merchant), to help protect against transaction misuse.

What it delivers
• **Security.** Issuers and cardholders benefit from new and more secure ways to pay, improved transaction approval levels, and reduced risk of subsequent fraud in the event of a data breach, since a token is exposed instead of the account number.
• **Protection.** Acquirers and merchants experience a reduced threat of online attacks and data breaches, as token databases will be a less appealing target given limitation to a specific domain.
• **Confidence.** Acquirers and merchants have a higher assurance level in authorization transaction processing risk decisions when a payment token is presented.
• **Interoperability.** This open specification facilitates interoperability and reduces data security and protection requirements.

VISA CARDHOLDER AUTHENTICATION SERVICE (VCAS)

TAILOR AUTHENTICATION TO TRANSACTION RISK

What it does
Visa Cardholder Authentication Service (VCAS) helps reduce fraud by evaluating risk in real time, then asking for further authentication based on the level of risk. Primarily focused on e-commerce, it prompts merchants to request various levels of authentication when the card is not present.

What it delivers
• **Responsiveness.** Enables the vast majority of low-risk transactions to go through without authentication, but requires additional information as the risk level increases.
• **Flexibility.** It supports a wide range of authentication methods, including dynamic authentication data.
• **Convenience.** It makes low-risk transactions easy, fast, and frictionless for consumers.
DYNAMIC KEY EXCHANGE

SIMPLIFYING PAYMENT SYSTEM SECURITY

What it does

The Dynamic Key Exchange (DKE) service increases payment system security by making it practical to change PIN encryption keys frequently. By modifying our PIN processing and cryptographic key management practices, we have made it possible for issuers and acquirers to change these keys through online VisaNet messages.

What it delivers

- **Savings.** Reduces the effort required to change keys manually and the risk of key compromise for bottom-line savings.
- **Efficiency.** By moving from a manual system, DKE streamlines the key changing process and minimizes errors.
- **Flexibility.** Users can configure the DKE service at the BIN, PCR, or station level based on their unique needs, and identify whether they want to receive keys periodically or upon request.

VISA INTERACTIVE MOBILE ALERTS

SPEED IDENTIFICATION OF FRAUDULENT TRANSACTIONS

What it does

Visa Interactive Mobile Alerts gives cardholders the power to quickly confirm or deny suspicious transactions through SMS text messages. Enrolled cardholders receive a text for transactions that are identified as suspicious by their issuer. Cardholder confirmation and denial messages are captured by Visa Risk Manager, enabling the issuer to quickly block accounts when fraud is indicated.

What it delivers

- **Speed.** SMS Alerts are sent in near real time, speeding cardholder notification and enabling prompt response.
- **Fraud Prevention.** Uses faster and more cost-effective channel to improve the identification and management of fraud.
- **Satisfaction.** Fewer false-declines reduces decline-based attrition and improves the cardholder experience.

85% of high-limit cardholders ranked unauthorized charge protection as their top customer benefit.

Source: Visa Amex Affluent Cardholder Research May 2012
VERIFIED BY VISA

INCREASE SECURITY WITH PASSCODE AUTHENTICATION

What it does
Verified by Visa prevents unauthorized card usage in e-commerce transactions. It uses several techniques to do this:

- A static authentication based on a password.
- A one-time passcode provided in real time via a mobile or other device.
- An extra password, following the three-domain (3-D) secure protocol specification, ensures that only the actual user can carry out a transaction.

Static Authentication
Cardholder enters a single registered password online.

Dynamic Authentication
Cardholder enters a one-time passcode (OTP) provided in real time by the card issuer via mobile phone SMS or by an OTP-generating token device.

Utilizing the three-domain (3-D) Secure protocol specification, Verified by Visa enables cardholders to authenticate their identity via an extra password, ensuring that only they can use the card online.

What it delivers

- **Growth.** Verified by Visa encourages more online shopping, since it increases security of transactions.
- **Efficiency and savings.** Reduce exceptions and chargebacks and the costs that come with them.
- **Risk management.** Minimize fraud and the liabilities it leads to.
VISA SMART DEBIT/CREDIT (VSDC) CHIP

IMPROVE CARD AUTHENTICATION

What it does

The Visa Smart Debit/Credit (VSDC) Chip is a chip payment service that embeds a small chip on a credit or debit card that stores data to authenticate, authorize, and process transactions securely. Chip payment technology offers enhanced security, value, and convenience for consumers and businesses. It enables verification of:

- User’s identity, even if the transaction is offline.
- User’s PIN, even if the transaction is offline.
- Whether the card and the data on it are valid.
- Whether the type of transaction is allowed.

Through sophisticated cryptographic techniques, VSDC offers superior protection against fraud and counterfeit. The program supports Visa, Visa Electron, and Plus card products, as well as contactless transactions.

What it delivers

- **Fraud protection.** VSDC technology provides additional ways to detect and reduce fraud.
- **Compatibility.** VSDC technology is compatible with EMV specifications.
- **Innovation.** Chip technology is the underlying foundation for future payments innovations, including Near Field Communication-based mobile payments.
- **Convenience.** Integrating chip technology into cards enables enhanced global acceptance because it aligns with dynamic authentication technologies already in place in some geographies.

A Small Chip with Big Benefits

A chip card is a plastic payment card with a microchip that is virtually impossible to duplicate. Market transitions to EMV chip have proven that chip cards help reduce counterfeit fraud. The use of stronger authentication methods and unique transaction elements make chip card account data less attractive to steal and counterfeit fraud a near impossibility. This offers:

- Greater protection against counterfeit fraud.
- Increased consumer confidence in the payments system.

Visa chip cards also have a magnetic stripe on the back to ensure acceptance at POS terminals that do not have a chip-reading device.
VisaNet provides you with options. Select a solution configured to meet your needs now, and easily update later with services that address your evolving situation.
VisaNet’s Business Intelligence solutions help you transform transaction processing data into insights that can help improve operations, boost performance, and enrich the cardholder experience. Business Intelligence can be used to establish intelligent offers that create new revenue opportunities and strengthen relationships, to manage expenditures more intelligently and ensure funds go where they should, or to reduce fraud, waste, and misuse. VisaNet Business Intelligence solutions include:

**Experience Enrichment** — Create a more targeted, more satisfying experience for customers while increasing sales.

44 Visa Account Updater
45 Visa Loyalty Platform Services
46 Visa Offers

**Data Insights** — Transform raw data into intelligence that enables better operations.

47 Value-Added Reporting
48 VisaVue Online

**Network Optimization** — Simplify dispute management and establish the operating guidelines and rules for an effective payments ecosystem.

49 Operating Regulations
50 Visa Resolve Online
Experience Enrichment

As the digital age unfolds, ensuring an effective and impactful customer experience is increasingly important. Today’s consumers have high expectations for more personal, more relevant relationships with the businesses and entities they work with. VisaNet helps make that your reality.

VISA ACCOUNT UPDATER

KEEP RECURRING PAYMENTS GOING

What it does

When account numbers or other data on customer cards change, it can disrupt automatic or recurring payments and result in service interruption until new account information is provided. Visa Account Updater solves this problem by acting as a repository for new account information from issuers that can then be automatically provided to acquirers and their merchants. The end result is seamless service for customers and continued payments for merchants.

What it delivers

- **Business continuity.** Businesses that depend on automated payment and subscriptions can keep customers, increase sales, and reduce cancellations.
- **Convenience.** Cardholders don’t need to contact multiple businesses when card information changes.
- **Savings.** The cost of lost business is reduced, as are the costs of manually updating account information.
VISA LOYALTY PLATFORM SERVICES

ENHANCING CONNECTIONS WITH CUSTOMERS

What it does

With Visa Loyalty Platform Services, merchants and issuers can use transactional data to create and customize loyalty programs. Once cardholders register online, their past spending can be used to qualify them for loyalty programs. Merchants can apply rules and filters, determine qualifiers using key requirements, and calculate rewards based on purchases and spending. Rewards can be delivered in various ways — as credits on their Visa account, merchant points, miles, or some other currency. Clear, rapid reporting enables merchants to know what kind of an impact the program is having to help improve future promotions.

What it delivers

• **Customer satisfaction.** Customers are rewarded for their purchases with promotions that are highly targeted and based on past behavior, creating greater loyalty.

• **Flexibility.** The program can be deployed pre-built or tailored to business needs. It can function as a stand-alone program, or work in complement with existing loyalty programs.

• **Support.** Merchants get access to VisaNet data, as well as resources and end-to-end support from Visa for crafting their program and ensuring success.

How it works

![Diagram of Visa Loyalty Platform Services process]

**Identify.** Client provides list of cardholders to track. Optional service available to allow cardholders to register online via opt-in registration site.

**Qualify.** Visa monitors transactions for eligible accounts, applies business rules or filters, and determines qualifiers based upon program requirements.

**Report.** Visa provides program reporting to quantify impact, inform follow-up promotions, aid in business development, and assist in future targeting programs.

**Calculate.** Visa calculates the rewards as a percentage, fixed value hurdles, or transaction count. Reward cap may be utilized at the program or card account level to limit liability.

**Fulfill.** Visa may also fulfill rebates/discounts to cardholders in the form of statement credits. Rewards file provided by Visa to client as points, miles, or other rewards currency.
VISA OFFERS

TARGETED OFFERS PROVIDE INCREASED RELEVANCE

What it does
With Visa Offers, merchants, acquirers, and issuers can use VisaNet data to develop and deliver relevant offers to the right consumers at the right time in the right place. The service can analyze past spending by the cardholder, decide which offers might be relevant to them, and deliver that message in real time.

What it delivers

• **Interest.** Offers are highly targeted based on previous purchases and current location, making sure the offers are relevant to the cardholder.

• **Loyalty.** Visa Offers creates a richer, more individualized customer experience, which drives greater spending and also increases customer loyalty.

• **Convenience.** Cardholders can receive offers directly on their mobile device in real time, so there’s nothing to remember and no coupons to clip.

*Visa Offers integrated with Visa Integrated Redemption Platform (see page 7).*
Data Insights

Data is only as good as the action it informs and enables. With VisaNet, you have a number of tools you can use to access, analyze, and interpret data in order to transform it into actionable intelligence.

VALUE-ADDED REPORTING

DATA DELIVERED YOUR WAY

What it does

If your organization prefers access to data outside of structured reports, Value-Added Reporting offers a variety of information for integration into your own systems:

• Settlement Reports are daily, monthly, and cumulative reports that can be sorted based on product sales, account type, and various other criteria, to manage business more effectively.

• Raw Data Reports give merchants and acquirers the option to receive transaction details without formatting, the best way to prepare them for automatic processing. With field-level data for each transaction as well as interchange data, these reports are most suited to clients who authorize and clear online in single message format.

• POS Authorization Reports offer detailed authorization data that can be used to help with clearing transactions. Clients can configure the types of transactions and the transaction fields that appear in reports, and establish a delivery schedule for reports to balance their processing load.

What it delivers

• Visibility. Get a clear view of your business, your processing efficiency, and other data.

• Efficiency. Analyze and configure reports based on the factors that matter most to you, and input raw data reports in the best way for automatic processing.

• Performance. Based on these insights, you can improve operations and speed up clearing.
VISAVUE ONLINE

GET CLEAR PERSPECTIVE ON SPENDING PATTERNS

What it does

VisaVue Online enables merchants, acquirers, and issuers to see their latest transaction and benchmark data in a variety of easy-to-use, standard and custom reports, for a clear view of purchase activities and spending patterns. With access to 25 months of portfolio data and 13 months of transaction-level data, you can track results over time. And with aggregate information about peers that can be used for comparison, it’s easy to benchmark performance and plan for improvement.

- **Fast Data Availability**
  See month-end reports within days (near real time* access with Enhanced Level).

- **Enhanced Merchant and Geographic Information by Visa**
  Updated “rules” provide better merchant and location information than raw data.

- **Quick Reports**
  Provides one-click instant data for commonly requested reports and analysis.

- **Historical Data**
  Immediate access to 25 months of portfolio-level data and 13 months of transaction-level data (Enhanced Level).

- **Online Database Maintained by Visa**
  Manage your business without having to maintain a data store.

- **Multi-Currency Reporting**
  Consolidate and report by multiple currencies at country, sub-regional, and regional levels.

- **Multi-Language Capabilities**
  Easily switch between English, Spanish or Portuguese with VVO’s flexible user interface.

What it delivers

- **Optimization.** Improve performance with powerful analytics capabilities.

- **Speed.** See month-end reports in days, and get common reports and analyses with one click.

- **Flexibility.** Take advantage of multi-currency and multi-language reporting at the regional, sub-regional, and country level, and dynamically convert different currencies for a complete picture of spend.

- **Convenience.** The system automatically cleans and organizes data and tailors it to fit the user’s profile and business needs.

*Posted up to the previous day
Network Optimization

Helping our clients work efficiently and effectively is a core component of the VisaNet advantage. We have developed services and support to help our clients optimize the way they operate.

OPERATING REGULATIONS

CLEAR, PROVEN GOVERNANCE AND OVERSIGHT

What it does

An effective electronic payments system depends on an equitable, transparent, and accountable regulatory network that governs how all stakeholders participate and are paid. With decades of experience in electronic payments, Visa’s Operating Regulations provide a set of principles and enforcement processes that everyone can trust.

With VisaNet, established rules clarify the roles and responsibilities of each participant and provide guidance that ensures every player understands their obligations. Oversight systems give everyone from banks to cardholders confidence in the system. And there are established procedures to mitigate risk, prevent fraud, and inform participants about the inherent risks.

What it delivers

• **Confidence.** Every stakeholder in the VisaNet system understands their responsibilities and risks, and can trust Visa’s decades of success to ensure that everyone plays by the rules.

• **Fraud prevention.** Sophisticated regulations and mechanisms reduce fraud by potential perpetrators.

• **Objectivity.** VisaNet remains an objective observer with no allegiance to any given stakeholder. Instead, VisaNet’s sole responsibility is the successful functioning of the entire system.

Visa continually looks for ways to simplify the electronic payments ecosystem and make it easier for stakeholders to participate.
VISA RESOLVE ONLINE

MANAGE EXCEPTIONS MORE EFFICIENTLY

What it does
Visa Resolve Online streamlines the handling of transaction exceptions with a full range of dispute management services and tools. Decades of experience and best practices for dispute resolution have gone into creating this turnkey solution that puts acquirers and issuers in control of the cardholder and merchant portfolio.

Visa Resolve Online can help you more efficiently manage:

- Transaction investigation
- Case management
- Chargeback, pre-filing, and case filing questionnaires
- Financial transaction processing
- Fee collection and fund disbursement processing
- Fraud reporting
- Stop payment
- Exception file management

What it delivers

- **Best practices.** The VisaNet system brings decades of experience and innovation to dispute resolution.
- **Efficiency.** Reduce resolution times by focusing on the most relevant information.
- **Productivity.** Improve operations with automated case pickup and allocation.
- **Accuracy.** Use dynamic questionnaires and automation of QA processes to ensure precision.

There are three ways to connect to Visa Resolve Online:

**1 — USER INTERFACE**
Connect directly via Visa Online. This offers the quickest access and eliminates the need for maintenance or system updates by your staff.

**2 — BULK SYSTEM INTERFACE**
Connect your back office systems to VROL to send and receive batch information. This requires system work by your staff for initial setup and updates.

**3 — REAL TIME WEB SERVICES**
Experience seamless communication between your back office systems and VROL, with all case data maintained on your systems. This requires system work by your staff for initial setup and updates.
VisaNet offers a strong foundation for your payments future. From fostering business growth, to facilitating local transparency and control, to increasing global connectedness, the custom solutions that VisaNet enables can drive your progress and enable continued success. Welcome to the future of electronic payments. Welcome to VisaNet.
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In chemistry, a catalyst is an agent that speeds up reactions. In a similar way, VisaNet is a catalyst for economic growth and development, an agent, a partner that helps more business get done.
With VisaNet, you benefit from:

• **Efficiency.** Reduce systems complexity and gain ongoing maintenance and future R&D cost savings opportunities.

• **Control.** Establish the parameters that determine when, where, and how payments occur to improve security and prevent fraud, waste, and misuse.

• **Convenience.** Provide a fast and safe way to pay now, pay later, or pay in advance, whenever and wherever.

• **Scalability.** Support a broad range of payment services from efficient domestic payments to far-reaching, cross-border remittances and international payments.

• **Reliability.** Trust in decades of proven success in payment processing. Years of technology, security, and processing experience enable near 100% uptime performance.

• **Flexibility.** Configure a custom solution of products, features, and services that meet your needs now and that can expand in the future.

• **Innovation.** Draw upon the latest payment technologies and benefit from the fact that we’re already working on what you will need to stay at the forefront of payments advances.

• **Availability.** Enjoy the proven reach, acceptance, and uptime of the world’s largest payments network.

• **Security.** Protect against fraud, theft, and unauthorized use with proven technology, trust, integrity, and a suite of advanced security and risk management tools.

Start building your future today with VisaNet. Contact your Visa Account Executive.