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Who is NewNet?

NewNet Communication Technologies is a leading provider of innovative solutions for next generation mobile and fixed line networks, mobile messaging, as well as secure transaction processing. NewNet enables global telecom operators, equipment manufacturers, acquirers, processors and financial institutions to rapidly develop and deploy cutting edge revenue generating applications that deliver feature-rich, value added services.

NewNet offers solutions around five major areas: Secure Transaction, Broadband Networks, Mobile Messaging, Interactive Voice Response, as well as Mobile Charging and Rating. NewNet Secure Transactions portfolio includes TraxcomSecure electronic transaction processing solutions for dial and IP platforms, which deliver services such as mobile payments, e-banking, and e-commerce; as well as 2G/3G CDMA Packet Data Servicing Node (PDSN)/Home Agent (HA) platform, which provides economic delivery of premium mobile data services in CDMA networks. NewNet Broadband Networks solution offers WiMAX end to end wireless broadband product portfolio from the former Motorola Solutions. NewNet Mobile Messaging portfolio includes Lithium SMS Solution, a future proof, innovative and modular short messaging service platform; Mercury MMS Solution, the industry’s most complete purpose-built, mobile multimedia content delivery platform; Cobalt iDEN and CDMA solution, which provides short messaging solutions for iDEN and CDMA networks; as well as Distributed 7, a robust SS7 signaling stack for wireless operators/service providers across 2G, 3G, 4G and all IP networks. NewNet Interactive Voice Response portfolio includes Nimblevox solution, which provides a platform for customers to create, host, and deploy voice and SMS services. NewNet Mobile Charging and Rating portfolio includes Invigorate Real-Time Charging and Rating platform, a convergent solution for rating voice, data and content in real-time.

NewNet Highlights

Over a twenty year heritage in Wireless and Wireline

Telecommunications Solutions for the foundations for network innovation

Complementary and forward looking technology and products

Consistent year over year profitable revenue growth

Product Offerings:

NewNet Secure Transaction
- Secure transaction processing infrastructure (TraxcomSecure)
- 2G/3G PDSN/HA platform

NewNet Broadband Networks
- 4G wireless and mobile broadband solutions (WiMAX)

NewNet Mobile Messaging
- Lithium SMS network: full fledged SMS infrastructure for GSM Networks
- Mercury MMS solution: mobile multimedia delivery
- Cobalt iDEN and CDMA messaging solution
- D7 signaling Platform

NewNet Interactive Voice Response
- Nimblevox Engine to develop IVR applications
- Nimblevox Build to create, modify and deploy voice applications
- Nimblevox Blast to support out-dial campaigns

NewNet Mobile Charging and Rating
- Real-time, end-to-end charging and rating solution complete with data reporting and archiving
NewNet Communication Technologies continues to be a global leader in providing innovative solutions for next generation mobile and fixed line networks. We have a customer presence across the globe, with service and support responsibilities for over 180 customers across 92 countries. NewNet Communication Technologies has nearly 300 systems deployed worldwide. NewNet Communication Technologies is headquartered in the United States with sales and support teams located around the world.

NewNet Solutions Global Presence

NewNet Communication Technologies TraxcomSecure payment routing and processing solutions process multi-billion transactions annually with major deployments at global acquirers, processors, carriers and banks. Many of these deployments across all geographies are countrywide implementations of the solution. The TraxcomSecure systems process 20% of the global annual transaction volume with 1 in 4 transactions in North America, 1 in 3 transactions in South America, and 1 in 4 transactions in the Asia-Pacific regions.
**Access Guard Mobile/Broadband Gateway**
The AccessGuard 1000 solution from NewNet Communication Technologies is designed to process millions of mobile, broadband IP based POS transactions, m-commerce and e-commerce payments transactions and mobile wallet payments. AccessGuard delivers the fundamental security capabilities needed to enable safe and reliable transport of financial transactions, security verification, or any data which requires high levels of data encryption over many network types. Designed with flexibility as one of AccessGuard’s core features, the system can also process, non-financial based transactions, including, business to business verifications, security verifications, point to point encryption and a variety of custom applications that require the highest level security and efficiency.

**Payment Transaction Gateway**
The Total Control Secure Transaction Gateway (STG) is NewNet’s next generation solution for carrier class transaction network service providers. Leveraging the widely deployed Total Control platform, the Total Control STG offers a small form factor for dial, IP and X.25 payment transaction switching and routing powerhouse with great emphasis on performance, scalability and security. Integrating with network management, monitoring, configuration handling, statistics, billing, and reporting applications, the Total Control STG system expands the opportunities for customers to avail new generation application services.

**Accounting & Network Management Products**

The Common Element Manager System (CEM) provides flexible, centralized management for the TraxcomSecure family of products. This powerful solution enables performance, fault, and configuration management of single and multiple Secure Transaction Gateway-dial and AccessGuard 1000 chassis and their components in all NewNet Communication Technologies base service environments.

**Secure Transaction Gateways**
Access Guard Mobile Gateway & Total Control STG are designed to process millions of transactions, providing maximum system reliability with load balancing, redundant components and automatic fail over. Our solutions are PCI-DSS compliant and perform high speed routing based on patented technologies enabling faster transaction completion.
TraxcomSecure product portfolio enables customers to securely and efficiently participate in the enormous growth and revenue potential in the payments market.

**Accounting & Network Management**

Real-time Call Detailed Records are captured by the AccessView reporting server at the end of each call. Network Operators can monitor and build a subscriber summary table using the most recent data. On a system wide basis, transaction statistics can be used for traffic analysis according to the time of day, system components, offered load and transaction routes.
Why NewNet TraxcomSecure?

TraxcomSecure Leads The Payment Ecosystem
TraxcomSecure solutions are an integral component of the payments ecosystem, whether the payment is from the swipe of a credit card or the tap of a mobile wallet enabling a phone at any Point of Sale (POS) device. Our comprehensive solutions process transactions from credit, debit, prepaid or gift reward cards. Supporting both traditional payment methods using dial, broadband and mobile payment terminals as well as mobile wallets, secure web payments and NFC terminals. The TraxcomSecure product portfolio, is an all encompassing set of solutions for the implementation of secure, high performance and highly scalable payment transaction networks. The product portfolio is an integral component used by banks, transaction acquirers, payment processors, retailers, financial institutions, educational networks, fixed and mobile communication service providers, Independent Sales Organizations (ISO’s) and governments for building secure payment networks.

Develop With High Security Standards
TraxcomSecure solutions are PCI-DSS compliant and perform high speed payment routing based on patented technologies enabling faster transaction completion with cutting-edge hardware acceleration. The solutions offer advanced cryptographic technology to provide the highest level of encryption ensuring secure processing of the transaction flow.

TraxcomSecure Mobile Payments
The TraxcomSecure Mobile/Broadband gateway platforms, not only provide secure interfaces for the transactions emanating from the mobile payment devices, but also provide continued secure processing as the transactions are delivered for further processing in additional nodes and servers in the carrier or financial processors network. The flexible gateway implementation provides the capability to handle mobile transactions using a variety of protocols, with the ability to incorporate any new and additional requirements with a simple software update. The solution thus offers unique services necessary to enable mobile carriers or merchant acquirers and processors deploying advanced mobile payments such as NFC payment systems, mobile wallets etc.

Power Efficient, Small Footprint & Eco-friendly Green Products
The unique TraxcomSecure product portfolio provide the integrated capabilities of secure transaction processing, protocol processing and interworking and flexible network routing of payment transactions in a single system implementation. For dial access, the TraxcomSecure systems support industry leading capacity of 8E1/T1 ports per box with the ability to support routing to legacy X.25 or IP based transport to the processor infrastructure. The fully integrated IP mobile/broadband gateways provide SSL termination and off -loading, transaction protocol processing and transaction routing in a highly scalable package with the ability to process over 2 million transactions in an hour with a single system.

Expanding Beyond Payment Transactions
The innate secure processing and high performance capabilities of the TraxcomSecure solutions are now being extended to deliver secure processing of electronic benefits data, medical data and insurance information in m-health applications. These applications bring the ease of secure electronic processing and delivery to new applications driven by the explosive growth of smart card and smart device technologies.
Solutions To Broader Payment Eco System

Acquirers, Processors, Banks & Financial Institutions
TraxcomSecure solution suite empowers acquirers, processors, banks and financial institutions to efficiently deploy a complete solution that performs SSL off-loading, transaction protocol processing and transaction routing, all within a fully integrated platform. As a proven solution with numerous global deployments, TraxcomSecure enables traditional acquirers and processors with support for legacy host interfaces and to bridge the gap with the Mobile technologies for fast emerging NFC & Mobile Wallet payments.

MNO’s and Carriers
TraxcomSecure systems empowers MNOs and Carriers to actively insert themselves into the payment eco system. The services available to the mobile operators include NFC Mobile wallet payment routing & processing, merchant acquiring services, integrated card & carrier billed services, alternative payment processing capabilities etc enabling them to offer key value added services for the ecosystem. Additionally the TraxcomSecure platform allows for a smooth transition from dial to mobile or broadband IP based solution.

Retailers, Hosted Service Providers and ISO’s
With an active industry presence over two decades and cutting edge solutions, TraxcomSecure systems enables retailers, hosted service providers and ISO’s with integrated single platform solutions for multiple access based payment solutions with advanced security levels. TraxcomSecure continues to innovate with latest payment solutions for secure payment processing to provide solutions for Mobile, Broadband and Dial access based solution from legacy terminals and most advanced Smartphone/Tablets as POS payment devices.

Partnering With You To Develop An Optimal Business Model Tailored To Match Your Market Profile & Service Goals With Focus On Speed-To-Revenue
**AccessGuard 1000 Mobile/Broadband Gateway**

The AccessGuard 1000 from NewNet Communication Technologies is designed to process millions of mobile or broadband IP based POS transactions and m-commerce, mobile wallet and e-commerce payments. The AccessGuard platform provides the fundamental security capabilities enabling safe and reliable transport of financial transactions, security verification, or any highly encrypted data across communication networks. The highly flexible AccessGuard solutions are being extended beyond payments transaction processing to support other customized applications such as business to business verification, point to point encryption that need the highest level of performance and efficient security. Key features of the AccessGuard platforms include:

- Termination and off-loading of SSL security protocol processing
- Support for Derived Unique Key Payment Transaction (DUKPT) and end to end custom security protocol processing
- Processing and interworking of transaction protocols such as VISA I, VISA II, ISO 8583 and TPDU (Transport Protocol Data Unit)
- Seamless interoperability with legacy and next generation host processing systems
- High performance protocol processing and routing
- Highly scalability solutions scaling
- Up to 2M transactions per hour today with future upgrades to support over 10M transactions per hour on a single system
- From a few hundred payment terminals to supporting tens of thousands of terminals

**Versatility with Security**

AccessGuard offers the capability to route payment transactions to any authorization server based on multiple criteria including shortest path, server availability, server traffic, pending transactions, least cost network route, network availability etc. This system also offers the option to route transactions in real time to specific destination servers based on user specific rules. Specific configurable rules that can be supported involve routing based on transaction type, transaction values, location, charges etc and may be expanded for any custom required parameter. Products sold in financial transaction market require strict adherence to regulatory and agency approvals. The AccessGuard is compliant with PCI DDS security requirements. We also, support financial transaction protocols like VISA I, VISA II, which provide opportunities to offer more value added services. AccessGuard offers enhanced transaction data security with support for the DUKPT standards used for encrypting transaction data from IP payment terminal and mobile payment devices.

**Bringing Existing into The Future**

The AccessGuard 1000 will securely interconnect the new or legacy banking servers with mobile broadband IP POS or payment terminals, while safeguarding the sensitive data during the transit over the public internet or private network. AccessGuard Offers seamless support for all existing transaction protocols with Authorization Servers, enabling acquire and Processors to utilize their existing Banking Server used for offering dial transactions to be extended to support the mobile transaction.
Secure Transaction Gateway (STG)
The NewNet Total Control transaction gateway platforms are the next generation, market leading, carrier class solutions for payment transaction processing in service provider networks. The new and improved platforms, which incorporate a specialized software suite, offer customers the ability to deliver high performance, cost effective and highly competitive end-to-end network solutions to the electronic payment transaction industry. The platforms enable fast transaction processing of credit card authorizations, debit card fund transfers, health benefit authorizations, electronic benefits transfers, and other communications involving single-session transfer of small amounts of data. In addition, the Total Control STG is designed for future expansion with two Intel Sandy Bridge processors onboard that support emerging technologies and applications with advanced high speed modem processing and DSP capabilities.

Key features of the transaction gateway are:

- PCI DSS compliant with Secure Shell (SSH) for remote access and management of the system
- Fast Connect
- Processing and interworking
- Synchronous Data Link Control
- DNIS number or transaction data fields
- IP or legacy X.25 packet network
- Generation of transaction specific call detail records

No Single Point Of Failure
The Total Control transaction gateway provides maximum reliability with redundant access router cards that can be used in the load balancing mode for normal operation but will switch to a fail over mode when there is failure of one of the cards to provide continued system operation. The access router cards switch back to the load balancing mode upon fault restoration. Redundant DSP cards can be included in the system and can be used as backup to the primary call processing cards and will in the event of failure of the primary card take over the call processing in the system.

A Powerful High-Density Platform
The NewNet Communication Technologies Total Control transaction gateway products are powerful high-density platforms designed for processing hundreds of millions of transactions. The Total Control STG is designed to run on industry standard, high performance 1U rack amount hardware and is scalable by stacking more boxes as traffic increases. The transaction gateway platforms reduce the modem handshake time by 75 percent and connection time as little as one second, speeding transaction times and reducing costs.

Total Control Transaction Gateway Advantages

**Speed Transactions**
Reduces modem hand shake time by 70 to 75 percent and connection time as little to as one second, speeding transaction times and reducing costs

**Supports The Latest Standards**
Supported transaction protocols include: most recent Visa I/II, Synchronous transaction protocol ISO 8583, TPDU. We also support the PCI DSS standards.

**System Redundancy**
Provides maximum system reliability with load balancing, redundant components, and automatic fail over.

**High Density and Scalable**
STG is single unit hardware with small footprint, easy to deploy and manage. Each rack mount 1U system of STG supports up to 8 T1/E1s and can be stacked for linear capacity expansion.
**Common Element Manager**
The Common Element Manager System (CEM) is a network element management solution that is used to manage the TraxcomSecure product portfolio. The Java based CEM features an easy to use graphical user interface to view system status and availability at a glance. The Java 2 SE v1.5 implementation enables service providers to use a compatible server platform of their choice. The system provides open XML interface and scripting application interfaces to enable operators to customize the management solution and rapidly deploy the solution.

**Access View Accounting Server**
The AccessView Accounting Server is an integral part of the TraxcomSecure product portfolio, captures accounting and network statistics information from the Transaction Gateway and the AccessGuard gateway solutions. The AccessView then processes and stores the information in a database, to support subscriber billing, transaction recording, report generation, network performance monitoring and system modeling functions in the network. The collation of per customer data provides critical data for billing customers as well as to provide operators insight into the customer usage patterns. The per transaction data provide system operators the granularity to track performance statistics and help pinpoint any network anomalies or issues. The data can also be used for additional offline analysis applications such as fraud detection.
Our highly experienced professional services team has proven processes with innovative technology to ensure that customers launch their services on time and on budget. Our expertise enables you to maximize the competitive advantage and efficiency for your TraxcomSecure portfolio.

**Services For TraxcomSecure**

The NewNet services team is a highly experienced team of services professionals with proven processes and innovative technology to ensure that customers launch their services on time and on budget. At launch, NewNet provides a wide range of services that help you deploy and manage applications to monetize the network, and a service delivery platform to enable an application ecosystem. We also have the expertise to manage your network, with flexible options based on your requirements and business model. Our service professionals are in every region of the world, and there is no place too remote for us to help you. With our established, leading-edge network design, systems integration and program management services, supplemented with our proven industry leading experience in successful multi-vendor, multi technology secured environments. Our services have been tried and tested to supply complete payment transaction solutions as the market moves towards cloud based and third party managed services. This expertise enables you to maximize the competitive advantage and efficiencies for your unique payment processing solutions based on the foundation of the TraxcomSecure product portfolio.
About NewNet Communication Technologies, LLC

Headquartered in Arlington Heights, IL, NewNet is a recognized leader in mobility technologies with a primary focus in messaging, signaling, wireless broadband, consumer internet, multimedia content delivery, mobile advertising, real-time rating and charging, Interactive Voice Response (IVR), and secure transaction processing. NewNet Communication Technologies is a part of the Skyview Capital LLC, portfolio of companies. Skyview Capital, LLC, is a private investment firm that specializes in the acquisition and management of companies across multiple sectors of technology, telecommunications, services, and niche manufacturing. For further information, please visit www.newnet.com

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