



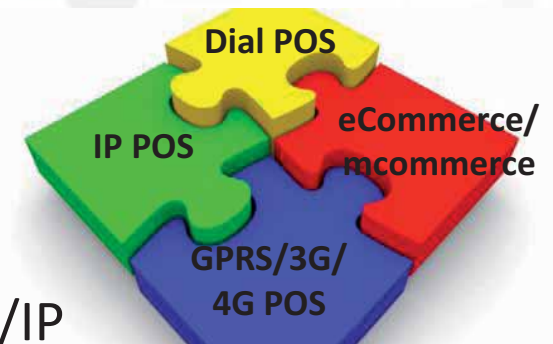
NewNet Communication
Technologies
FOUNDATIONS FOR NETWORK INNOVATION

Total Control Secure Transaction Gateway *Integrated Dial & IP (STGi)*

Total Control STG - Version 4.0(STGi) Integrated Dial & IP Access



- ✓ Integrated Dial & IP Access based Payment Transaction Transport
- ✓ Secure Transaction Aggregation & Intelligent Routing and Switching System (STAIRS system)
- ✓ Gateway aggregates transactions from Dial, GPRS/IP POS Terminals and switches/routes to Authorization Host Servers
- ✓ Securely routes transactions over IP or optionally over X.25/SNA
- ✓ Industry grade Linux operating system
- ✓ State of the art dual Sandy Bridge processors
- ✓ Full redundancy
- ✓ Advanced TI DSP processors
- ✓ Transaction aggregation and priority routing features
- ✓ Economical solution for small, medium transaction volumes





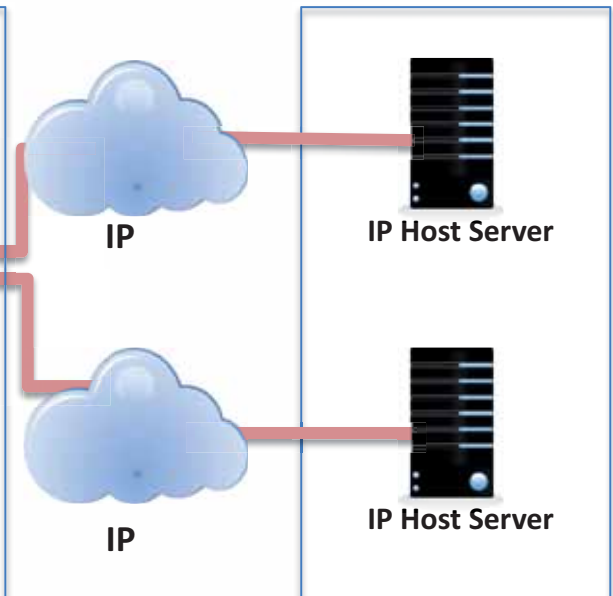
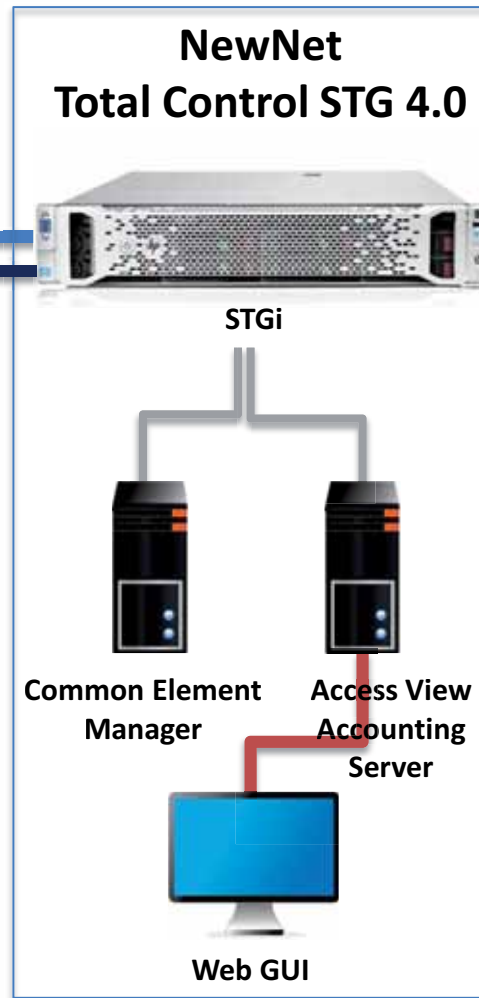
**1 In Every 5 Global Transactions
Are Handled By A
NewNet Total Control Secure
Transaction Gateway**

Secure Integrated Dial & IP Transactions

Dial Transaction Terminals








GPRS/IP Transaction Terminals



Transaction Authorization

Secure Interfaces

-  3DES, SSH
-  SSL, IPSec, HTTPS
-  3DES, AES, DUKPT
-  SSL/HTTPS
-  SSL/HTTPS/TCPIP

Versatile

- IP & Dial Downlink/ingress from POS
- HTTPS for Web transactions
- POS terminal agnostic
- IP and optional X.25/SNA (towards processors) on the Egress/Uplink



Integrated System

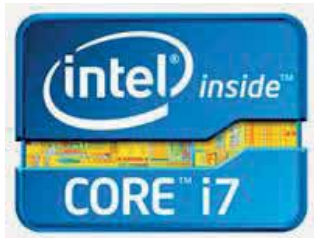
- 2 E1/T1s for Dial access
- 1000 IP downlink & 1000 IP uplink sessions in 2U form factor
- Linear scalability simply by adding new servers
- Thousands of DS0s in clustered architecture
- PCI-e Modem card
- Expandability with AG, STGd systems for high end volumes





Industry Standard Hardware

- Dual Intel sandy bridge processors
- 6 Core multi threaded processors



High Availability

- Redundant software architecture (with load sharing)
- Redundant power supplies
- Seamless transaction routing especially during peak hours



Secure

- Compliant with PCI DSS standards
- Secure Shell (SSH) for remote access
- IPsec
- SSL/TLS
- HTTPS

Extensive Protocol Support

- Analog connection functionality
- VISA I/II
- ISO 8583
- TPDU
- SSL IP POS Terminal Support
- HTTPS POS / Web transaction support
- Per call DNIS based modem configuration
- T1, E1, ISDN
- Fast Connect negotiation



System Advantages

Software

- Auto detect Synchronous and Asynchronous modem calls
- Secure Shell (SSH) for remote access
- CDRs provided to Access View platform for billing, analytics and fraud detection
- Single system for SSL over TCP/IP and HTTPS transactions



Hardware

- Industry leading integrated IP, Dial downlink system
- Low power consumption and heat dissipation



System & Services

- About 25 years of international deployment
- Tier 1 Acquirers, Processors and Carriers as customers
- Integrated with major POS systems world-wide
- Customization software services for integration with proprietary POS and server interfaces

Technical Specifications

- Dual 2.0GHz Intel Xeon 6 Core Processor
- Linux OS
- 4 x 1GE
- 2U & 1U Form Factor
- Fast Train Dial Transactions
- Network routing – RIP, OSPF , BGP
- Network Filtering
- IPsec Security
- Virtualization
- PCI-e slot For Security Module Expansion
- IPv6 Support
- XML Transaction Processing
- Support HTTPS, SSL/TLS POS Sessions
- Single Processor low end option
- Migration Option to Modem Over IP Capability



Transaction Benefits – Faster Connection



- Early Host connection options on call arrival from POS to reduce delays later
- Persistent Host connections to avoid repeated connect, disconnect delays
- Emulated protocols modes to speed up the processing regardless of delays from POS or Host
- Options to share load across multiple Host servers to reduce overloading of single servers and improve transaction completion time



Transaction Benefits – Shorter Duration

- Tracking of connect, response and transaction times on per transaction basis
- Ability to identify and improve delays based on E1/T1s, location, DNIS, POS IP Address, network path etc
- Options to modify configuration to improve the session times based on per DNIS/Ingress configurations
- Support configurable options for retransmissions at configurable intervals to attempt for successful transaction in first try from POS



Competitive Comparison



STG-i

Default Features

- Single CPU @2.0GHz
- Software based SSL
- 4 ports 1Gbps LAN
- 1024 IP Sessions (1024 up, 1024 down)
- 2U design
- SNMP based Management

Optional Features

- Dual CPU
- T1/E1 Digital Interface
- 1024+ IP sessions
- Dual CPU (added redundancy, high performance)
- 8 ports 1Gbps LAN
- 1U size system with single PSU & 2x1GE
- Hardware based SSL (future)

Included Enhanced Features

- HTTPS transactions
- SSL Client Certificate Verification
- Host Load Balancing



iNAC

Default Features

- Single CPU @2.0GHz
- Software based SSL
- 4 ports 1Gbps LAN
- 512 IP Sessions
- 5U design

Optional Features

- T1/E1 Digital Interface
- 1024+ IP sessions

STGd/AG1K & STGd – Key Capabilities Comparison



Features	Total Control STG 3.0 Dial	AccessGuard 1000	Total Control STG 4.0 Integrated
Downlink/Ingress POS			
Dial POS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IP POS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dial Downlink/Ingress Capacity			
Minimum E1/T1 PRIs	2	<input type="checkbox"/>	2
Expansion to 8xE1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dual Modem Cards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Max Dial E1/T1 PRIs	16	<input type="checkbox"/>	2
IP Downlink/Ingress Capacity			
Minimum IP Sessions	<input type="checkbox"/>	128	128
Expansion to 2000 sessions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Max IP Sessions	<input type="checkbox"/>	6000	1000
SSL Acceleration			
HW Crypto SSL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SW SSL	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ethernet Port			
GigEthernet Ports	4	4/8/16/24	4
10GE Ports	<input type="checkbox"/>	6	<input type="checkbox"/>
10/100/1000 Mbps compatibility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- Supported
- Unsupported
- Not Applicable

STGi – System Capacity & Target Segment

Targeting Low End Segment

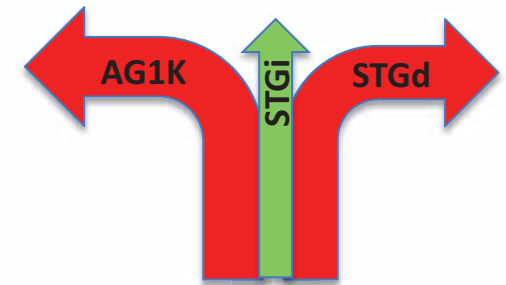
- Limited E1 needs: 1E1 or 2E1
- Limited IP/SSL Sessions: < 1000 sessions
- Integrated IP & Dial needs

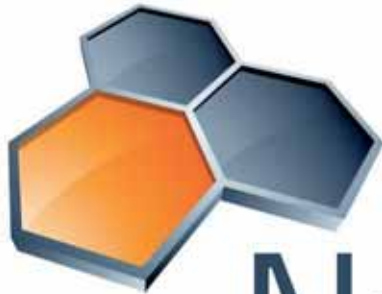
Limited Capacity

- Maximum 2 E1 for Dial access
- Includes 2 E1 port modem card only
- No expandability option for additional E1s
- Maximum 1000 sessions (1000 up/1000 down) for IP access
- SW Crypto for SSL/TLS handling
- No expansion option for additional SSL/IP sessions

Low End HW Versions For Economical Deployment

- Standard 2U system with Dual PSU
- 1 CPU/2 CPU options
- Low end system with Single PSU (1U system)
- 1U system with 1 CPU/2CPU





NewNet Communication
Technologies

FOUNDATIONS FOR NETWORK INNOVATION
