

***Drive IBM & IP applications across IP networks***

***No SNA protocols on the network***

***Improve SNA application WAN performance***

***LAN connect within the data center***

***Eliminate serial lines and controllers***



On-Line Transaction Processing (OLTP) applications are considered “mission critical” because they specifically deal with monetary transactions. OLTP networks have always been hierarchical with a centralized database typically running on large (IBM) mainframe computers.

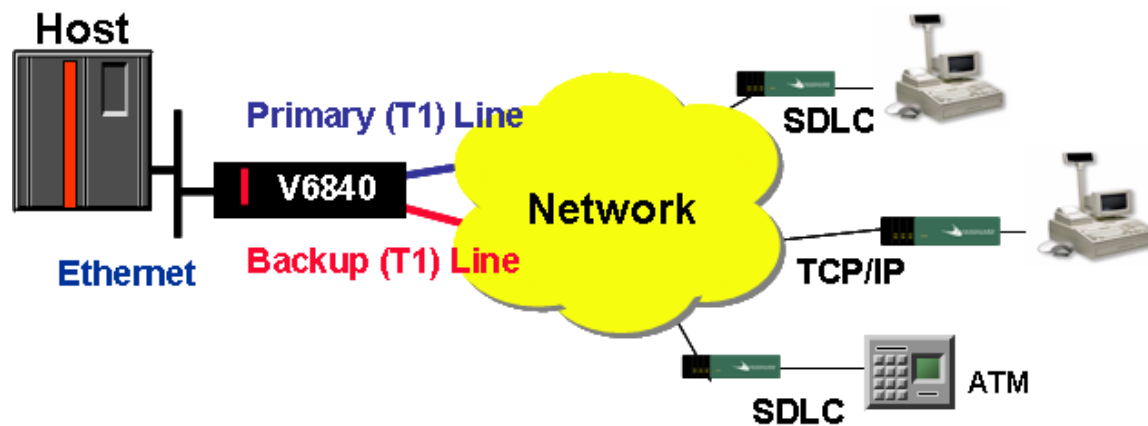
Most OLTP applications and networks were built around IBM's Systems Network Architecture (SNA). Estimates indicate that ‘trillions’ of dollars have been spent over the years in developing these highly secure and efficient applications and networks. Rewriting these applications would be cost prohibitive and have a limited ROI as the installed base still does the job. As a result large financial and retail networks still utilize SNA peripheral devices in many thousands of locations that include banking controllers, ATM machines, teller terminals, POS (Point of Sale) controllers and numerous PC based applications using emulation products.

Vanguard Networks Enterprise SNA Connector (ESC) was specifically designed for the financial transaction service provider and the branch banking industries to enable retention of these valuable assets and applications while maintaining a state of the art host environment and network. Other switching-type solutions push the SNA protocol across the network requiring high overhead resulting in limited performance.

Vanguard ESC provides a gateway into a carrier network from any remote location, and LAN based termination of the network into the central site data center. Any SDLC (WAN) or LLC2 (LAN) connected ATM, POS or financial controller can be connected to the remote Vanguard gateway. The gateway terminates the SDLC or LLC2 protocols and sends only the data across the network, without data link switching which sacrifices performance due to high overhead. The host-based Vanguard gateway then sends transaction data to an HP NonStop or IBM SNA host over a high speed LAN Ethernet connection.



Vanguard Networks secure financial gateways route data, not protocols. The SDLC protocols are terminated at the remote site and SNA is confined to the data center providing a pure data network with high performance and resiliency and minimal overhead.



**SDLC ATMs, teller terminals and POS controllers are all connected to the IBM host via a Ethernet LAN connection. All SDLC protocols are terminated at the remote locations and only data is passed across the network.**

The Vanguard Enterprise SNA Connector is fully compatible to all SNA subsystems including IBM Z/os Communications Server (VTAM), IBM SSP and NCP (IBM 3745 Communications Controller), HP Non-Stop SNAX subsystem, and ASI ICE SNA subsystem running on HP Non-Stop or Tandem host systems. ESC does not require APPN, HPR, DLUS and DLUR and does not encapsulate typical SNA (LU Type 2) sessions into LU Type 6.2. This significantly improves performance, simplifies host definitions and network problem diagnosis. Significant cost savings and application performance improvements can be realized.

- Leased line cost in the data center are eliminated
- Front end processors (HP SWAN or IBM 3745) can be eliminated
- Host processors can be upgraded to the latest technology
- Host network definitions are simplified
- Reduced and eliminated maintenance costs
- Higher availability and performance over LAN (OSA-2 and OSA Express)
- All SNA confined to the data center

Additionally, Vanguard Networks gateways also support IP or BSC ATMs enabling an enterprise to maintain and grow their IBM Z series mainframe environment and remote SDLC devices while co-existing with other IP-based and voice applications on a single network. All Vanguard gateways are designed to meet the toughest security standards of PCI and can be fully managed under SNMP.



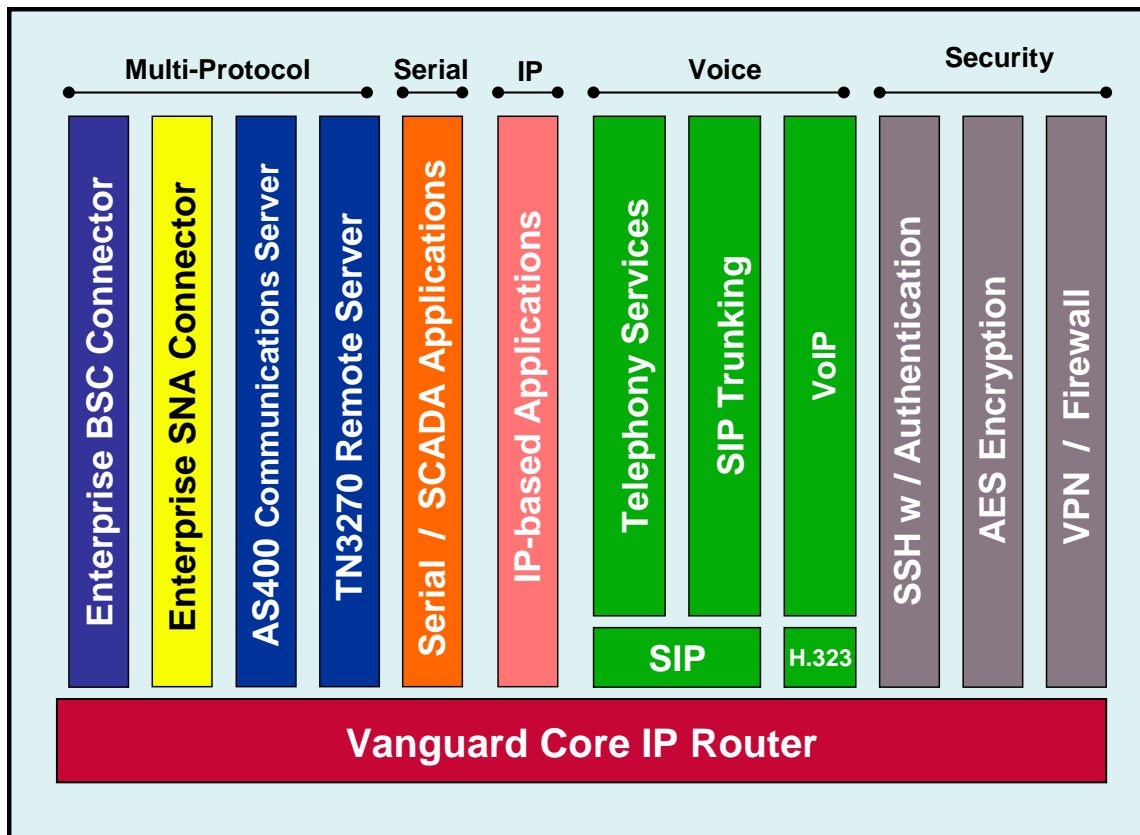
Vanguard Networks is an IBM "Partner in Development" and an Advanced Level Member of the IBM Business Partner program.

## The Vanguard Router Platform

The Vanguard base platform is a full-function IP WAN router, not just a limited capability protocol converter. The Enterprise SNA Connector is just one of the business-specific applications in the Vanguard ApplicationsWare™ software suite which runs on the Vanguard IP router platform. Other network vendors' solutions suggest that you should displace all non-IP systems and applications with IP-based infrastructure to then implement their network solution. That would be equivalent to requiring replacement of existing cost-effective and performing infrastructure solely to accommodate new "plumbing", which is contradictive to a company business and fiscal strategy.



In addition to enabling connectivity to today's most advanced IP network technologies such as MPLS, broadband and wireless, the Vanguard Networks solution supports all of your IP-based applications while simultaneously driving Non-IP (BSC, SNA, SDLC), AS400 (i-Series) Communications, Serial data, SCADA applications, and SIP Telephony Voice Services across a "single network".



Enterprise SNA Connector is one of the many applications offered in the ApplicationsWare suite that operate on the Vanguard IP Router base platform. All applications can be run across a single wide area network environment.

## Networking Solutions from Vanguard

Vanguard Networks provides converged network solutions deploying emerging transformation technologies to integrate voice, data, and video over a single network combining the latest architectures such as MPLS, Broadband VPN, and SIP Trunking to take advantage of the tremendous cost savings and value added services offered today. The Vanguard advantage enables Multi-Protocol SNA, SCADA, and serial data and voice access into these heretofore IP-only networks as an element of the IP convergence solution.

## Services

### System Support

Vanguard Networks support services range from web-based services that provide access to our knowledge base, diagnostic tools, software, and system fixes – to extensive remote and on-site expertise, combined to solve customer problems expeditiously.

The Vanguard Networks Customer Service Center is a single point of access to multiple levels of resources where problems are escalated appropriately to the most efficient skill set to handle each problem. Whether your network problem requires investigation by a software specialist or 4-hour on-site parts delivery, everything is coordinated from that first call.

### Network Implementation

For over three decades, Vanguard Networks has helped thousands of customers implement successful cost effective networks. We have seamlessly managed over one hundred daily network installations, all without impacting revenue-generating core business objectives. When you've got critical time scales for deployment, count on Vanguard Networks.

With our best in class network implementation services, you'll get a team of experienced professionals to integrate your network from start to finish. You'll retain ultimate network control, while benefiting from the knowledge and support of our specialists.

**For more information email [Sales@VanguardNetworks.com](mailto:Sales@VanguardNetworks.com).**

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