

Drive IBM& IP applications across IP networks

No BSC protocols on the network

Improve BSC application WAN performance

LAN connect within the data center

Eliminate serial lines and controllers



Driving IBM and HP NonStop systems BSC (Binary Synchronous Communications) applications across today's IP MPLS and broadband networks can present some unique challenges. Tunneling solutions push the BSC protocol across the network resulting in limited performance; and requires serial lines and front end processors for host termination in the data center.

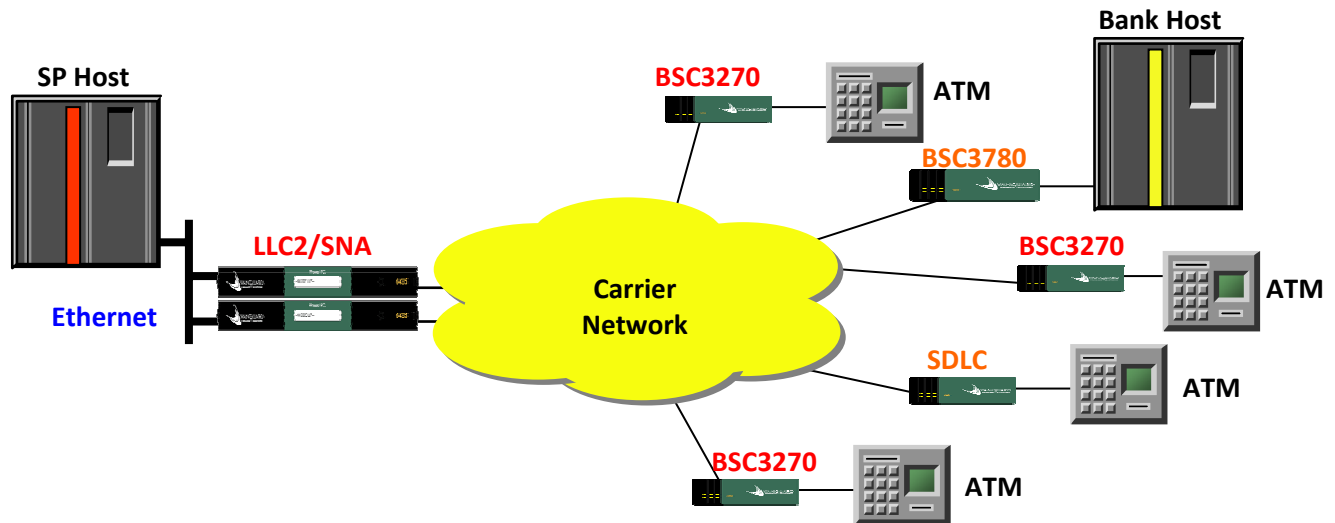
Vanguard Networks Enterprise BSC Connector (EBC) was specifically designed for the ATM Service Provider and the branch banking industries. Of the 400,000 ATM machines installed in the U.S. today, close to 70% communicate to a centrally located host computer using BSC protocols. These ATMs continue to provide an efficient, convenient and cost effective way for the consumer to do remote banking transactions. Vanguard Networks Enterprise BSC Connector enables the ATM Service Provider, bank or credit card processor to retain these valuable assets while maintaining a state of the art host environment and network.

Similarly, EBC also supports BSC2780/3780 communications for connectivity between a bank's host IBM system and an ATM Service Provider's host for clearing and reconciling ATM transactions.

Vanguard EBC 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 BSC ATM or bank host processor can be connected to the remote Vanguard gateway. The gateway terminates the BSC3270 or BSC2780/3780 protocols and sends only the data across the network, without tunneling. 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 BSC 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.



BSC3270 ATMs, SDLC ATMs, and a BSC3780 bank host processor are all terminated on the Service Provider's IBM host via an Ethernet LAN connection. All BSC and SDLC protocols are terminated at the remote locations and only data is passed across the network.

Financial Service Providers and banks can realize significant cost savings and application performance improvements.

- Leased line cost in the data center are eliminated
- FEP's (HP SWAN or IBM 3745) can be eliminated
- Host processors can be upgraded to the latest technology
- Host network definitions are simplified
- Host based SNA resources can now fully utilized supporting non-SNA resources
- Reduced maintenance costs
- Higher availability and performance over LAN
- Retain installed base assets (BSC ATM's)
- Service providers can accept BSC ATM's from their clients
- BSC protocols terminated at the remote location
- All SNA confined to the data center

Additionally, Vanguard Networks gateways also support IP or SDLC (SNA) ATMs enabling an enterprise to maintain and grow their IBM Z series mainframe environment and remote BSC 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.



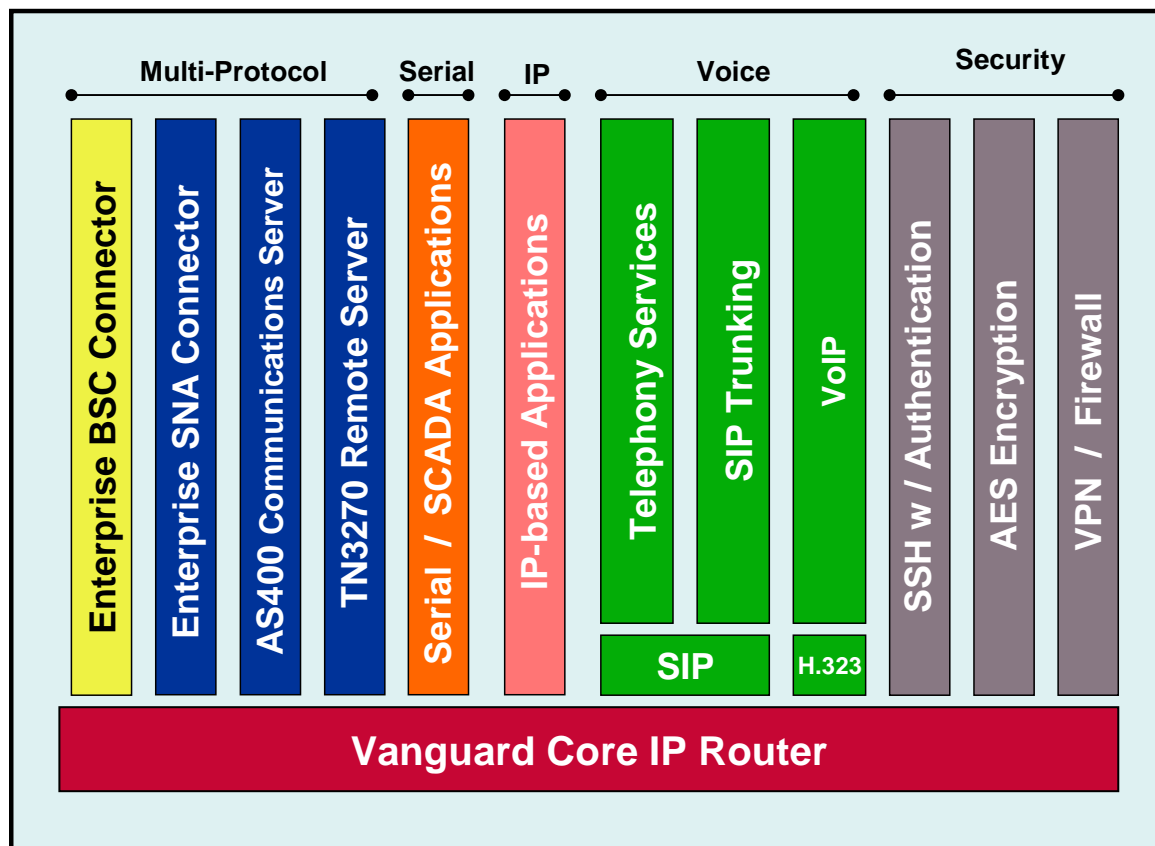
Vanguard Networks is an IBM "Partner in Development" and an Advanced Level Member of the IBM Business Partner program.

The Vanguard Router Platform

The Vanguard base platform is a full-function IP WAN router, not just a limited capability protocol converter. The Enterprise BSC 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, performing systems infrastructure solely to accommodate new network "plumbing", which is contradictory to 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 Multi-Protocol (BSC, SNA, SDLC), AS400 (i-Series) Communications, Serial data, SCADA applications, and SIP Telephony Voice Services across a "single network".



Enterprise BSC 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 BSC, 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.

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