# X.25 and Other Legacy Protocols Continue to Deliver Effective and Reliable Communications

By Mary Shacklett

Network communications infrastructures have seen so many advances over the past few years that it is easy to forget that legacy protocols are still widely deployed and relied upon in mission critical applications. For example, X.25 continues to be a reliable and mature technology with $10 billion worth of equipment deployed worldwide.

"The X.25 protocol is still widely used for WANs and is an international standard for packet data communications such as worldwide banking, telecommunications, lottery networks, credit card authorization systems, and private networks of global corporations," acknowledged BUSINESS WIRE.

As the first of the packet switching protocols, X.25 predates frame relay, ATM, and TCP/IP. As recently as eight years ago, X.25 was still the "first-choice" protocol for companies that could not justify a network of leased lines for inter- and intra-company data communications. X.25 had, and still has, the advantage of being intrinsically error-free and robust in situations where line quality is not optimal. It is tightly integrated in legacy applications, and continues to work well for the businesses that had originally developed them.

As the one-time "workhorse" of the industry, X.25's error-free environment is an important condition for financial transactions like credit card verification. Since X.25 gateways readily interconnect with different networks, it is also possible to communicate worldwide at a reasonable cost. The net result is that, even though much data traffic has moved to other technologies,

there are still distinct niches where X.25 and other legacy protocols are reliable and cost-effective solutions. "Fueling the resurgence in legacy communications technologies are corporations in vertical markets such as banking and healthcare," stated Computerworld. "Such companies store large amounts of data on host systems and depend on customized applications."

NSGDatacom's Alex Dobson agrees. "For many companies, X.25 communications protocols are deeply embedded in their mission-critical applications. These companies will have X.25 communications as long as suppliers provide it, because X.25 works well, is extremely reliable, and they want to preserve their applications investments. We see activity in the transportation industry, in transaction processing for credit and debit cards, and in other companies wishing to preserve their entrenched applications."

The recent economic upturn has been beneficial for network budgets and communications investments. However, network decision-makers continue to work within very tight project deadlines, with budgetary philosophies that take into account the deployment of new technologies at the same time that they consider the continuation of proven solutions that the business already has a lot invested in.

Many companies are choosing to use X.25 and other legacy protocols at the edge of their networks, and transport to a common IP backbone. They are continuing to implement solutions that provide them the capability to keep proven stable protocols in

place and eliminate the need to have multiple backbones. This way they can preserve their communications and applications investments, not make unnecessary infrastructure changes to what already works well, and maintain all of the benefits associated with the legacy protocols.

"Network decision-makers need to understand that all organizations do not move at the same rate of infrastructure adoption," stated Alex Dobson. "The goal is always to move forward with preparation efforts for new technology. With legacy systems firmly embedded in many organizations, companies are making strategic decisions to preserve the heritage of value, reliability, and investment that legacy systems provide. Still other companies are looking at mergers with outside organizations as a growth strategy. In these cases, network managers charged with integrating large to mid-sized companies need to be ready for infrastructure projects that come out of corporate mergers or restructurings—and that could include the adoption of communication protocols like X.25."

There are many choices today for bringing in specialized help and product solutions for both new and older technologies like X.25. Knowing the different players and the different possibilities for network communications deployment can make all the difference in successful technology



**Space agency control center**

solution implementation and evolution. The main thing to remember is, companies do not need to be afraid to stay with legacy protocols, since major communication manufacturing companies continue to develop, market, and support products that allow for a migration from legacy protocols to a common IP backbone.

*Mary Shacklett is a PCi contributing editor, specializing in technology and enterprise IT issues. She is president of Transworld Data, a business strategic planning and information technology company in Olympia, WA, and may be contacted at TWD_Transworld@mns.com*
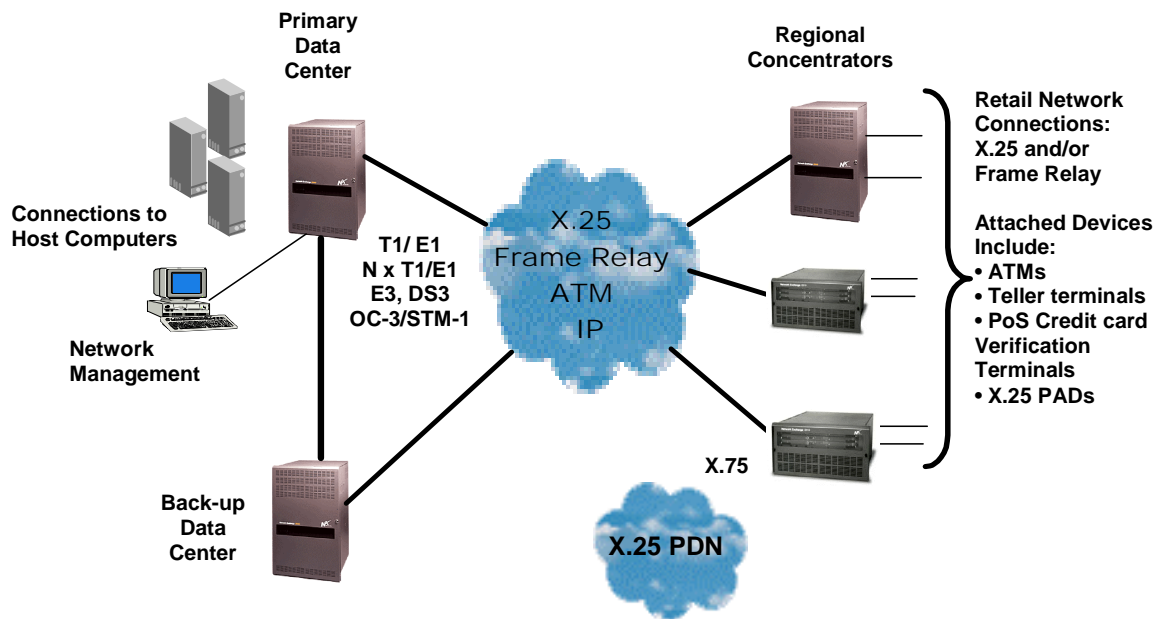
## Recent Press Releases:

May 4 ,2004 — multi-million line of credit with SunTrust Bank

March 30, 2004 —new VoIP product

March 24, 2004— 2210 voice/data gateway plays a crucial part in successful launch of ESA probe

For complete details on the above press releases please go to http://www.nsgdata.com/news/

**Primary Data Center**

**Connections to Host Computers**

T1/ E1
N x T1/E1
E3, DS3
OC-3/STM-1

**Network Management**

**Back-up Data Center**

X.25
Frame Relay
ATM
IP

**X.25 PDN**

X.75

**Regional Concentrators**

**Retail Network Connections:** X.25 and/or Frame Relay

**Attached Devices Include:**
• ATMs
• Teller terminals
• PoS Credit card Verification Terminals
• X.25 PADs

---

### X.25 and Frame Relay solutions from NSGDatacom

NSGDatacom has a heritage of over 20 years in the innovation, design, and manufacture of X.25 and Frame Relay network products. With three highly respected product lines: Netrix, TURBO and Dynetcom (Dynapac), we provide solutions that meet a wide range of port density and transmission speed requirements. These multi-protocol switching devices allow customers to preserve critical applications running on traditional protocols while planning for and migrating to IP. For more information on NSGDatacom's product solutions, please visit http://www.nsgdata.com/solutions/

---

## About NSGDatacom

NSGDatacom designs, manufactures, sells and supports a wide range of voice and data products focused on real world business communication needs.

Combining key strategic acquisitions with its own core development team, NSGDatacom utilizes a wide range of proven, stable technologies. NSGDatacom create solutions with these technologies to maintain and preserve organizations' network investments and mission-critical applications while enabling a smooth migration to newer technologies.

NSGDatacom products are deployed worldwide in corporate, financial, government, carrier, satellite, and cellular networks.

## Contact Information

3863 Centerview Drive
Chantilly, VA, 20151-3232 USA
Phone:   +(1) 703 793 2000
Fax:      +(1) 703 793 2001

903 Technology Center, 651 King's
Road North Point, Hong Kong
Phone:   +(852) 2515 1700
Fax:      +(852) 3527 7077

7435 New Technology Way
Frederick, MD, 21703 USA
Phone:   +(1) 301 662 5926
Fax:      +(1) 301 694 6279

The Brackens, London Road
Ascot, Berkshire SL5 8BE, UK
Phone:   +(44) 1344 893 000
Fax:      +(44) 1344 891 990

www.nsgdata.com