

STANDARDS WATCH

APPN and TCP/IP Together at Last?

APPN AND TCP/IP are usually as compatible as oil and water. The Advanced Peer-to-Peer Networking Implementer's Workshop (AIW), a vendor consortium that develops SNA and APPN standards, plans to change all that by devising ways to integrate TCP/IP apps and network management with APPN networks. IBM has proposed an API that will allow Java-based TCP/IP apps and applets to run over APPN networks, giving net managers the benefits of APPN's class of service while taking advantage of Java's dynamic application download ability and platform independence. Users would be able to download a terminal emulation application stored on a centralized device as a Java applet—eliminating the need to upgrade each desktop. IBM says object code for the Java bindings will be posted on the company's Web site later this year. The AIW is also considering ways to allow APPN addresses to be held in the domain name server. Net managers would be able to locate resources using a common directory for both APPN and TCP/IP nets.

Standardizing Web Management

A GROUP OF VENDORS recently banded together to create an industry standard that allows networks, apps, and systems to be managed from a Web browser. Participants, which included BMC Software Corp. (Houston), Cisco Systems Inc. (San Jose, Calif.), Compaq Computer Corp. (Houston), Intel Corp. (Santa Clara, Calif.), and Microsoft Corp. (Redmond, Wash.), want to get away from proprietary APIs and create specs that offer greater interoperability and reduced complexity. Their Web-Based Enterprise Management (WBEM) initiative embraces three new protocols and four Internet specs: HTTP, HTML, SNMP, and the Desktop Management interface from the Desktop Management Task Force (DMTF). Two new management technologies also are expected to be used in this standard: Hypermedia Management Schema (HMMS), a framework for collecting data that uses remote procedure calls as its messaging technology, and Hypermedia Management Protocol (HMMP), a protocol that permits disparate net and systems management tools to communicate. Products based on the schema and protocol should be available in 1997.

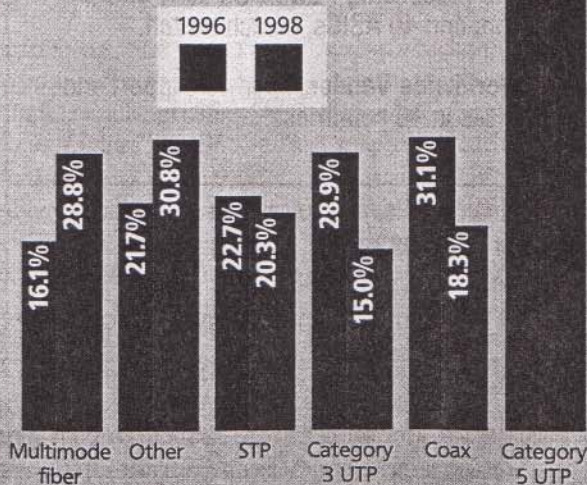
Fast Firewalls for ATM

ALL THE TALK about 155-Mbit/s ATM makes speed sound as if it's a certainty. But there are plenty of doubts about what sort of performance net managers will see on production ATM networks. After all, most of these setups will be secured by firewalls—boxes that are typically tested only to T1 (1.544 Mbit/s) or (in a few cases) to 10 Mbit/s. But recent evaluations at the University of Kansas (Lawrence) demonstrate that firewalls can handle more than 100 Mbit/s. Working on an OC3c (155-Mbit/s) ATM segment, researchers configured the Firewall Toolkit (fwtk), a software package from Trusted Information

Systems (TIS, Glenwood, Md.), on an Alpha workstation from Digital Equipment Corp. (DEC, Maynard, Mass.). The fwtk software, which is the basis for most commercial firewalls, forwarded TCP/IP packets at nearly 110 Mbit/s—or about 80 percent of the theoretical maximum of roughly 134 Mbit/s. "This is a milestone. It's the highest known throughput to date," says Mike Trest, chief scientist of ATMnet (San Diego), a commercial ATM service provider. Results of the University of Kansas tests are available on the Web at <http://www.tisl.ukans.edu/aai/reports/aai-perf/>.

Cable Jumpers

The need for speed is pushing U.S. companies to pull more cable. A recent survey of 241 mid-sized corporations reveals that 16.8 percent are running fiber now, with 28.8 percent planning to do so by 1998. Coax and Category 3 UTP, meanwhile, are losing favor fastest.



STP = shielded twisted-pair UTP = unshielded twisted-pair

Source: *Horizontal Network Cabling: A Reality Check*, Sage Research Inc. (Natick, Mass.)