

The Hidden Costs of LAN-Based Electronic Mail

BY WILLIAM BRANDEL
Senior Editor

Billed as a low-cost networking application, LAN-based E-mail is a very popular and strategic technology in corporate America.

But while recent studies indicate users don't have a firm handle on their E-mail costs, users say these studies don't even scratch the surface.

According to a recent survey

by the Electronic Mail Association (EMA), only 19 percent of sites track their message volume on their E-mail systems. In fact, many companies don't even know how many mail systems they have.

At the same time, corporations are buying new LAN-based E-mail systems at a record rate, and they are developing mail systems into sophisticated strate-

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E-mail study creates a stir. See Page 16 for details.

HSM for LANs Moves a Step Closer to Reality

BY CLAUDIA GRAZIANO
Associate Editor

Recent Hierarchical Storage Management (HSM) announcements from major backup-solution providers may mean significant savings in storage costs for LAN administrators in 1994.

Last month, Conner Storage Systems, a division of Conner Peripherals Inc., announced version 3.0 of its HSM software. Both Cheyenne Software Inc. in

Roslyn Heights, N.Y., and Legato Systems Inc. in Palo Alto, Calif., announced strategies that are supposed to result in HSM products next year.

HSM is a concept that originated in the mainframe and UNIX worlds. It is the process of migrating data off the local or server hard disk onto a "hierarchy" of less expensive media types, based on rules tied to fre-

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Fast Results From the Fast Ethernet Alliance

SynOptics, Intel team to ship products in second quarter 1994

BY ERICA ROBERTS
Senior Editor

The race to bring high-speed networking to users on Ethernet LANs is gaining fuel from new specifications and alliances that should yield products in the first half of next year.

Supporters of the 100Base-T Fast Ethernet standard recently completed specifications for the full complement of common copper-cabling types. 4T+, as it is known, will allow 100Mbps Ethernet to run on Category 3, 4, and 5 unshielded twisted-pair (UTP) wiring.

Capitalizing on these developments, Intel Corp. and SynOptics Communications Inc., both of Santa Clara, Calif., recently announced a pact to develop and market interoperable 10/100Mbps Ethernet products that offer a seamless path to high-speed Ethernet while preserving current wiring investments.

Scheduled to be released in the second quarter of 1994, the products will comprise 10/100Mbps Ethernet adapter cards from Intel and 10/100Mbps switching hubs

from SynOptics.

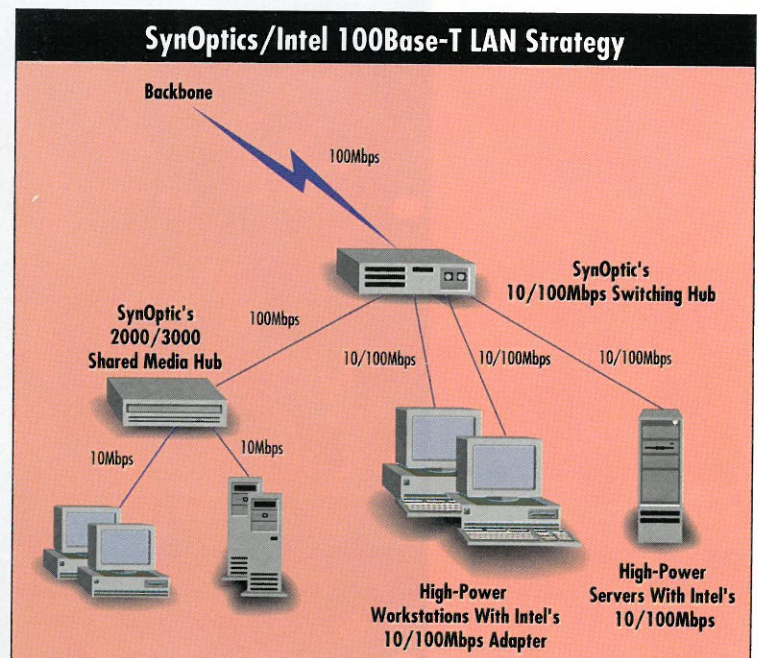
"SynOptics is interested in 100Mbps [Ethernet] as the big-pipe connection into the server [and] the client/server bottleneck in the hub," said Peter Tarrant, director of product management for SynOptics.

Vendors have been stressing the concept of Ethernet switching providing a full 10Mbps link to a workstation or sub-workgroup. But a bottleneck can still be created if traffic between the hub

and server is running at 10Mbps.

An existing solution would be to introduce an FDDI, or maybe a Copper Distributed Data Interface (CDDI), link to the server. With 100Mbps Ethernet, however, users will soon be able to take advantage of existing cabling infrastructures and, as vendors claim, all the existing hardware and software currently in use on Ethernet LANs.

"[Users] want to preserve as *continued on page 64—*



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SunConnect Gets Help on Advanced Management

BY JEREMIAH CARON
News Editor

A network-management licensing agreement SunConnect and NetLabs Inc. announced earlier this month carries high stakes for both companies. But network managers and applications developers may end up being the big winners.

The deal provides SunConnect with the foundation for a new distributed enterprise network management system, currently code-named ENCOMPASS, due out by the end of 1994.

The Solaris-oriented platform, based on NetLabs' DiMONS 3G architecture, is designed to provide such advanced capabilities as support for an object-oriented information store and console-to-console communications facilities sought after by managers of large networks.

Both SunConnect (a Sun Microsystems Inc. business) and NetLabs also plan to support the same high-level management application programming interface (API). Management appli-

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What It Takes for a Company to Implement New Technology

BY RONALD E. KAPLAN &
REBECCA A. BLAU

Special to LAN Times

How many LAN administrators have been confronted by a user's "Memo to Management" suggesting new applications and technologies the company should be exploiting? An easier question may be, how many have not?

With the ever-falling cost of computer technology, more people are experimenting at home with all types of hardware and software. They browse, explore, and become proficient with new boards and online services, such as CompuServe and Prodigy. They discover and install neat new features in the latest upgrades, such as WordPerfect 6.0, and they then expect it all in the office too.

And then comes the memo: Pages of suggestions on how the business could "really exploit its big investment" in hardware by "simply" using certain software packages or a peripheral just like the writer, who has already become "proficient."

As a LAN administrator, your first thought should be, "I need to enlist the writer as an ally."

NEED FOR APOSTLES. Implementing new technology without problems is impossible, so you can never have enough apostles to convert the foes of change.

Take the time to educate the writer about your methodology for change, the issues you must address before introducing new hardware or software, and those considerations that may be unimportant or not even exist in a standalone effort.

Avoid a defensive posture in responding to the memo; it only raises questions, which may result in increased supervision or more bureaucracy over your activity.

As a LAN administrator, you are likely to benefit by educating such users on the many factors that must be considered before implementing new technology. But make sure they feel you are giving their request adequate attention—make your answer simple, but not patronizing, and don't include information that is seemingly irrelevant to their suggestion.

PICTURE THIS. Following is a hypothetical case that will illustrate how to handle these situations.

One of your users purchased and installed a home faxmodem and fax software. Fresh with his first fax success, he sends you a memo asking why he can't do the same directly from the PC in his office. From the user's perspective, this is clearly a valid expectation. You can choose one of two approaches to educate the user on the differences between a

personal and company environment:

1. If the user believes he has a unique need to fax from his PC, he will also think installing a phone line and faxmodem in his PC suffices, just as at home.

But assuming the company uses cost-recovery equipment to charge back client faxes, to do this means an additional, nonstandard effort is required to track faxes from this user.

Using the faxmodem in the user's office PC may be seriously complicated and conflicted by the network interface card, shell software, and other elements of the standard office configuration. Providing a single faxmodem is likely to introduce substantial and unique overhead.

2. Ideally, the company would install a fax server to enable all network users to send and receive faxes from their PCs.

But before the project can go forward, you need to analyze and research cost-recovery tracking, inward fax routing, and fax-volume considerations coupled with a wide variety of hardware, software, and mixed options.

And since users will naturally expect this new function to be as reliable as network printing, you must establish formal testing, training, and user procedures before the fax server can go "live."

Moreover, many other details must be ironed out before using a fax server:

- Faxes often require signatures, so mechanisms and policies must be established to incorporate them.
- A PC with a fax board or a dedicated fax server must be installed as an additional node on the network.
- User fax mailboxes must be established.
- Disk capacity must be evaluated and expanded, if necessary, because fax files tend to be large and users are remiss about deleting them.

Hopefully the user will understand such additional—and often contrasting—considerations and will thus appreciate the much greater burden of deciding on technology for the company vs. for an individual.

RESPONSIBILITIES. Phrased generically, to implement new technology, the LAN administrator's responsibilities include:

- defining requirements,
- evaluating competing products,
- obtaining prices,
- establishing priorities,

PACKET

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Companywide Application Checklist

How do you respond to an enthusiastic user's suggestions? Here's a list of concerns that may help users understand what it takes to implement companywide applications:

- ✓ A new application must be LAN-compatible and should not conflict with other LAN applications.
- ✓ The application runs in the available memory.
- ✓ The application cannot leave network resources in a state difficult to reuse.
- ✓ A plan for training users and network troubleshooters must be established.
- ✓ Automatic procedures to invoke and reset an application must be designed and tested.
- ✓ End-user documentation must be written.
- ✓ The application must be tested with new versions of DOS, memory managers, and NOS shells.
- ✓ Procedures must be put into place to track application use to ensure there is adequate virus protection, that software licenses are adhered to, and there is cost recovery for usage charges.
- ✓ Testing is needed to ensure compatibility with document-management systems, menuing systems, and so on.
- ✓ Testing must also be conducted with a wide range of hardware, including 286/386/486 processors; diskless, floppy-only, and hard-disk systems; monitors; and graphics cards.—R.K.

- planning for implementation, and
- creating system and user documentation.

All of these responsibilities slow down the process. Furthermore, depending on the size, expertise, and scope of the LAN administration department, some decisions might require outside expertise or assistance. Finally, since many people will share the new resources, consideration must be given to a consensus of user needs.

With computers proliferating, user enthusiasm and involvement in initiating change can only increase. The LAN administrator—whose job once included a heavy dose of stimulating computer use in those perceiving it only as something "clerical"—now requires educating those embracing the computer.

In summary, accept the fact that most users don't understand that moving a company to a new technology is far more difficult and involved than it is for an individual. Once users understand this, though, their experimentation and input can be an asset and should be encouraged. ■

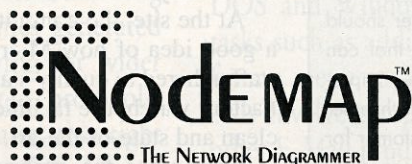
Ronald E. Kaplan is a management consultant with the REK Group in Los Angeles. You can reach him at (310) 551-0505; on MCI Mail as RKaplan (592-6105); or on the Internet as rkaplan@mcimail.com. Rebecca A. Blau is MIS director for Greenberg, Glusker, Fields, Claman & Machtiger, a Los Angeles-based law firm with 100 attorneys. She can be reached at (310) 553-3610.

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