Digital NEWS

The Newspaper for VAX Systems Management $3.95 MARCH 19, 1990

RICHARD LEFEBVRE, Raxco president and DIGITAL Newsmaker, page 82.

MAYNARD, MASS.

DEC to ax fragmented disk data

By ELIZABETH HEICHLER

Digital Equipment Corp. is getting ready to release its own disk-defragmentation product and is currently field testing the software, according to industry sources.

Disk defragmentation is a market niche occupied by a handful of third-party suppliers that have found big profits in one of the weaknesses of the VMS operating system. When storing the data in a file, VMS places it across different parts of a disk. As disks become full of such fragmented files, the reading or writing of files is slowed down because the disk head must jump around more.

Disk defragmenters reorganize data and place the entire contents of a file in one location on a disk; some of them also optimize performance by placing frequently accessed files together near the middle of the disk. Those that are rarely used are placed at the edges.

Last year, Digital acknowledged that fragmentation was a problem and that its suggested remedy, backup and restore, was often impractical. The company

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Robert Holmgren

DECWINDOWS INTERFACE WINS HIGH PRAISE from users at Colorado Center for Astrodynamic Research, according to assistant Carol Anne Clayson. (See story, page 42.) The April 2 DIGITAL NEWS will feature a DECwindows special supplement that covers systems management and development issues plus a look under the hood of the VT1000.

SAN FRANCISCO

Digital, Apple to offer first fruits of Alliance

Integration of Mac and PCSA

By LEN GRZANKA

AppleTalk for VMS version 3.0 and products that integrate the Macintosh with Digital's PCSA (Personal Computing Systems Architecture) are expected to highlight a joint product announcement by Kenneth Olsen, president of Digital Equipment Corp., and John Sculley, chairman and chief executive officer of Apple Computer Inc. The announcement will take place in New York the first week of May, industry sources said.

Two years ago, Olsen and Sculley first shook hands on center stage and pledged a pact aimed at seamlessly integrating Macintoshes and AppleTalk networks into DECnet/OSI. The two will again join forces to announce a series of products aptly named Alliance. The products are the first direct consequence of the joint technology agreement signed by the companies in January 1988.

Third-party alternatives

The Alliance products will be available from Digital and Apple, but in many cases, third parties currently offer alternatives with similar features.

Third parties that have been briefed on the announcement said they expect the companies to release details on products that integrate the Macintosh with Digital's PCSA. PCSA currently supports MS-DOS, VMS, Unix and Ultrix; OS/2 products are under development.

PCSA integration will provide Macintosh users with transpar-

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BOSTON

Lotus blooms on the VAX

By DIANA HWANG

In an attempt to capture a piece of the VAX market, Lotus Development Corp. of Cambridge, Mass., entered the spreadsheet wars as it finally unveiled Lotus 1-2-3 for VAX/VMS systems last week.

At a news conference held at the World Trade

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VAX 8000s at PC prices? Buying used can pay off

By SUSAN GRECO

For users who cannot afford one of Digital Equipment Corp.'s VAX 6000 systems, there are plenty of consolation prizes in used VAX 8000s. In many cases, the 2- to 6-year-old 8000s make up in price what they lack in performance.

As VAX managers upgrade to the new 6000 models, VAX 8700s are repeatedly coming onto the used market, "but there's just no demand. It's very difficult to find a home for them," said Dennis Lynch, president of Merida Trading Group Inc., a used-equipment dealer in Woburn, Mass.

"[VAX 8530s and 8550s] are slowly going the way of the humpbacked whale," he added.

Rather than languish in this slow market, Merida recently identified several hundred sites that were VAX 8530 owners likely to upgrade to a VAX 6000 Model 400. Merida representatives contacted these sites and urged them to upgrade their 8530 at bargain-basement prices rather than buy a new machine.

"What we suggest is upgrading 50 percent for the next 16 to 18 months," said Lynch. "Any [new equipment] that comes out today is at peak price. It's better to wait."

Merida offered customers an

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Data center runs itself

VAX automates bank's network

By JOHN COX

There are two ways to manage a VAX data-center operation that leaps from 1.5 MIPS to 75 in 18 months.

MANAGERS SPOTLIGHT

"You either throw huge amounts of dollars into [MIS] manpower – a field with a high amount of turnover – or you can build systems with artificially intelligent processes to control your network," said Ron Rubin, assistant vice president and data-center manager for the U.S. branch operations of Caisse Nationale de Credit Agricole, the Paris-based commercial bank rated last year by "Institutional Investor" as the world's ninth largest.

Rubin, who was hired just a year ago to manage the booming growth of the Chicago-based data center, chose the second course, which he described as a capital investment strategy.

Eighteen months ago, the entire center consisted of one VAX-11/785 that supported terminals in Chicago and New York, and an IBM System/34 that ran an accounting package. The VAX supported software developers and all Credit Agricole's back-office banking applications.

Now the data center has a VAXcluster that consists of two VAX 6410s and a 6310; the latter is for software development.

In addition to the New York office, San Francisco and Los Angeles offices now are linked to the Chicago cluster by a wide-area DECnet LAN (local-area network). Nearly 70 IBM-com-

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Victor E. Powell

INVESTING IN MANAGEMENT software keeps staff costs low, says Ron Rubin, data-center manager.

Networking

BILL HANCOCK

TCP/IP: Is it here to stay?

The purchaser and manager of network hardware and software is faced with a myriad of issues these days. One issue that generates much controversy and serious discussions is that of the longevity of TCP/IP as a suitable protocol solution for networks.

Some managers view TCP/IP as another network solution capable of solving certain networking problems, specifically with Unix or derivative machines because most Unix and derivatives have TCP/IP already available on the operating system or as an inexpensive feature to implement.

Others approach TCP/IP with a religious zeal that has to be seen to be believed. In my experience, those that approach any networking solution with zeal tend to indicate that the network solution they are zealous of is the only one they understand. There are others who regularly thumb their noses at TCP/IP because of the variety of user interfaces, support problems and other issues that plague any network solution that does not have single-vendor support or a reliable, standardized implementation by all vendors.

Not faithfully implemented

Yes, it is sad – but true. Many TCP/IP implementations, when compared with the military standard or the list of supported Internet/ARPAnet (Advanced Research Projects Agency Network) protocols, do not faithfully implement the protocols. Furthermore, because TCP/IP are just two of many protocols that tend to make up the solutions that vendors call TCP/IP, there is a great deal of confusion as to what exactly TCP/IP is. It also causes customers major grief, as well.

One of my larger customers recently tried to get a TCP node on a Token Ring to communicate with a TCP node on an Ethernet. That customer used three different Token-Ring-to-Ethernet bridges before getting the protocols straight only to find that they could not communicate because the vendor of the Token Ring package did not implement the necessary features for communicaing with the Ethernet TCP package. In short, both nodes were running TCP/IP, but they could not talk to each other.

TCP/IP was originally developed for ARPAnet as a packet-radio solution and eventually was modified to allow connectivity between dissimilar machines on a variety of network implementations.

This was originally due to a lack

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LAN LINKS

Microwave links are talking LAN-to-LAN

By JOHN COX

Microwave radios, equipped with LAN (local-area network) bridges and special interfaces, are proving to be a reliable and cost-effective way to link Ethernet LANs at dispersed VAX sites.

Point-to-point microwave links offer several benefits when interconnecting LANs, including full 10-Mbit/sec., IEEE 802.3/Ethernet bandwidth, high reliability and costs that compete with those of leased T-1 lines or beat those of fiber cabling, according to a group of users, vendors and analysts.

Until recently, the most extensive use of microwave transmission has been by end users who are anxious to bypass local telephone company access charges for voice traffic, according to Steve Kropper, program manager of ISDN (Integrated Systems Digital Network) and intelligent networks for International Data Corp., a Framingham, Mass., market research firm.

But now, he said, the fastest growing segment is in data communications, where microwave radios – with an Ethernet interface and a repeater, router or bridge – link LANs over several miles (wide-area links still must rely on 1.54-Mbit/sec., T-1 or larger leased lines).

Digital Equipment Corp., in partnership with radio maker M/A Com MAC Inc., of Chelmsford, Mass., has been offering its Metrowave Bridge for exactly this purpose for approximately two years. Metrowave combines a Digital Ethernet-microwave interface and LAN Bridge 100 or 150 with an M/A Com microwave radio for roughly $30,000, according to Pat Fleuz, Digital's Metrowave product marketing manager.

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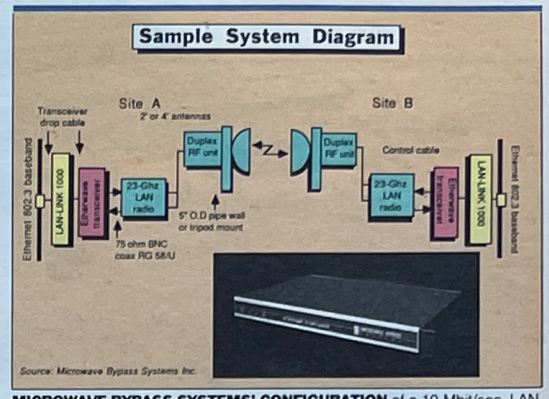

MICROWAVE BYPASS SYSTEMS' CONFIGURATION of a 10-Mbit/sec. LAN extension over a wideband 23-Ghz microwave link is seen in the above system diagram. In the inset at right is the firm's Etherwave Transceiver.

COMMUNICATIONS SOFTWARE

VAXmail gets phone and fax extensions

By ELIZABETH HEICHLER

Ergonomic Solutions has introduced two VAX/VMS software packages that extend VAXmail communications to telephones and facsimile machines.

MailTalk enables remote users to dial in via a Touch-Tone telephone, and a DECtalk speech synthesizer will read the mail messages. Users can obtain the name of the sender and the subject of messages, and instruct the system to read only those messages selected. Via the telephone keypad, messages can be forwarded, moved to a mail folder and replied to, and additional messages can be sent. The system can be instructed to telephone a user directly upon receipt of any message or one from a specific sender. MailTalk requires a DECtalk (DTC01 or DTC03) speech synthesizer connected to a standard RS-232 serial line.

When a user enters a message via the keypad (which permits entry of most ASCII characters, including space and punctuation), MailTalk echoes each character, word and function for confirmation. There is also a speed typing function that enables users to construct messages with standard text, words or phrases that have been previously written and stored on the host computer. MailTalk's vocabulary can be supplemented with special terms, foreign phrases or jargon associated with the user's business.

FaxForward software

The company's new FaxForward software allows users to set up VAXmail so that it will forward their mail messages to a facsimile machine. Messages are forwarded immediately upon receipt. The software automatically generates a cover sheet that includes the source and destination of transmission, number of pages to follow, and identity of sender and recipient.

When used in conjunction with MailTalk, FaxForward can be instructed to enable forwarding options from any Touch-Tone telephone.

MailTalk and FaxForward are scheduled to ship May 30. MailTalk is priced from $1,199 to $9,799; FaxForward, from $1,249 to $9,949.

Ergonomic Solutions, Software Products Division, P.O. Box 7052, Plainville, Conn. 06062, (203) 793-0445. ■

For more information, circle 122 on Reader Service Card (page 8).

NOTEBOOK

NJE services on TCP/IP

Joiner Associates Inc. of Madison, Wis., has introduced Jnet TCP NJE, which provides NJE (network job entry) services over TCP/IP networks. According to the company, the product was developed primarily for Bitnet, an NJE storage-and-forward network, because recent expansions in Internet have stimulated interest in using these TCP/IP networks to carry Bitnet E-mail, transferred files and computer conferences.

Currently, most Bitnet links are carried over dedicated leased lines, but with Jnet TCP NJE, this traffic can be routed via TCP virtual circuits. In addition, organizations with Internet connections but no direct Bitnet connection can now join Bitnet while maintaining a pure TCP/IP environment. Jnet TCP NJE requires VMS, Jnet (a network job-entry emulator that resides on the VAX and enables VAX-to-IBM mainframe communications) and supported TCP/IP software running on the same system. The company supports it with three TCP/IP products: MultiNet, WIN/TCP and CMU-TEK. Jnet TCP NJE is now available and priced at $6,000. Joiner Associates Inc., 3800 Regent St., P.O. Box 5445, Madison, Wis. 53705-0445, (608) 238-8637. **Circle 125.**

Racal's DECnet drivers – Racal-Interlan has announced that its data-link controllers for PC-XT and MCA (Micro Channel Architecture) systems are now supported with two

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Emulex debuts P4000-TL

EMULEX CORP. RECENTLY ANNOUNCED the Performance 4000-TL, which provides full compatibility with LAT (local-area transport) and TCP/IP protocol standards. Available in eight-, 12- and 16-port configurations (expandable to 28 or 32 with a 16-port expansion unit option), the P4000-TL also includes a high-speed parallel printer port with the 16-port models that operates at speeds of up to 2,000 lines/min. Throughput rates range from 38.4 Kbits/sec. using 16 ports simultaneously to 19.2 Kbits/sec. using 32 ports. It includes direct compatibility with VMS, Ultrix-32, RSX-11M-Plus and RSTS/E. Priced at $3,900, the P4000-TL is slated to begin shipping in April.

Emulex Corp., 3545 Harbor Blvd., P.O. Box 6725, Costa Mesa, Calif. 92626, (714) 662-5600. **Circle 123.**

TCP/IP SUPPORT

Lantronix adds 16-port server

By LEN GRZANKA

Lack of support for TCP/IP is the Achilles' heel of terminal servers from Digital Equipment Corp., according to Brad Freeburg, president of Lantronix Inc. "In a typical Digital environment, you have a lot of interest in TCP/IP support," he said.

To handle concurrent TCP/IP, LAT (local-area transport) and DECnet traffic, Lantronix, a Laguna Hills, Calif., developer of low-cost alternatives for Ethernet environments, has recently added a 16-port Ethernet terminal server called the ETS-16, according to Freeburg. In October, the company announced ETS-8, its eight-port version of the product.

Lantronix has not licensed Digital's LAT technology but uses an implementation that it developed

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