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HP Professional

JUNE 1998

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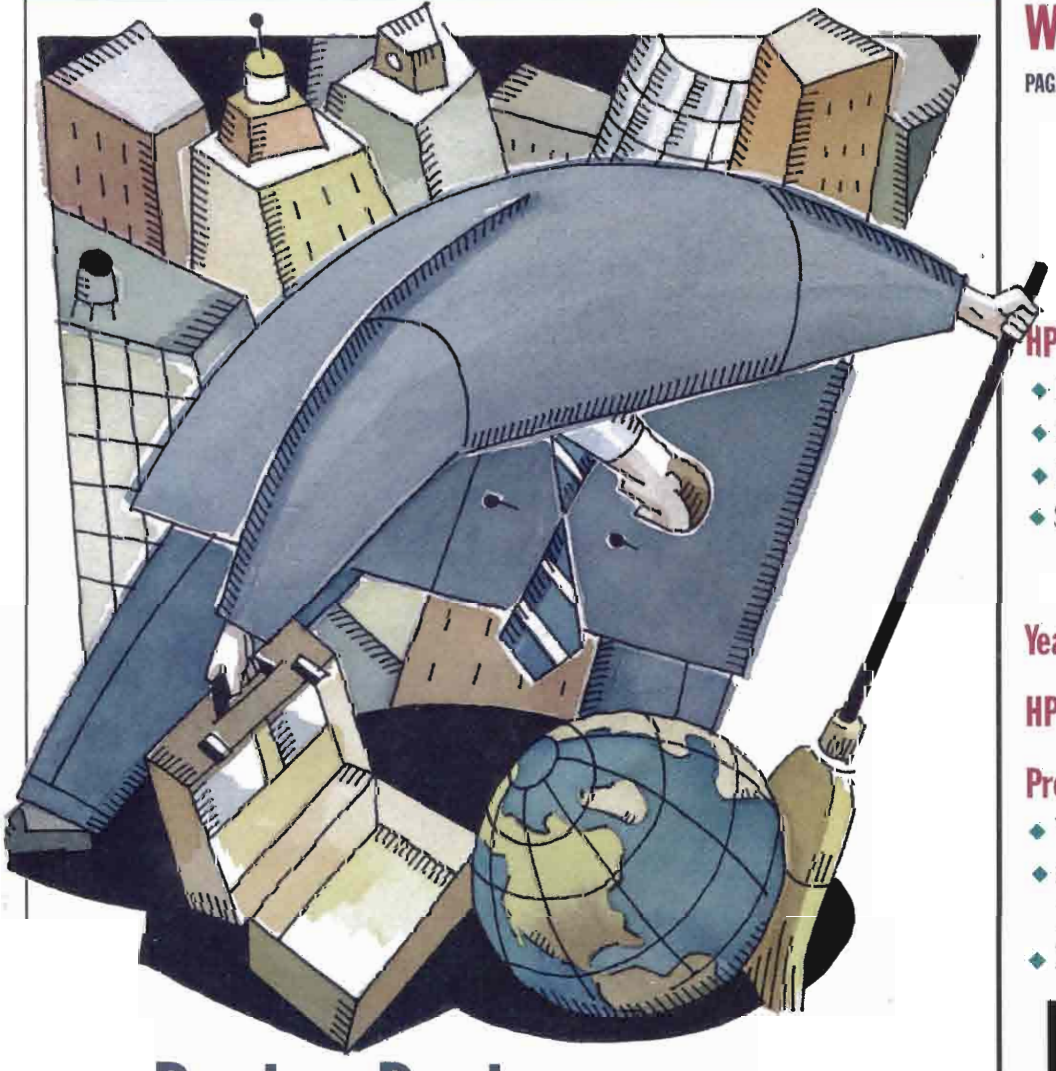
ENTERPRISE NETWORK INTEGRATION



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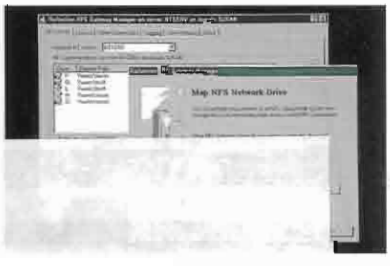

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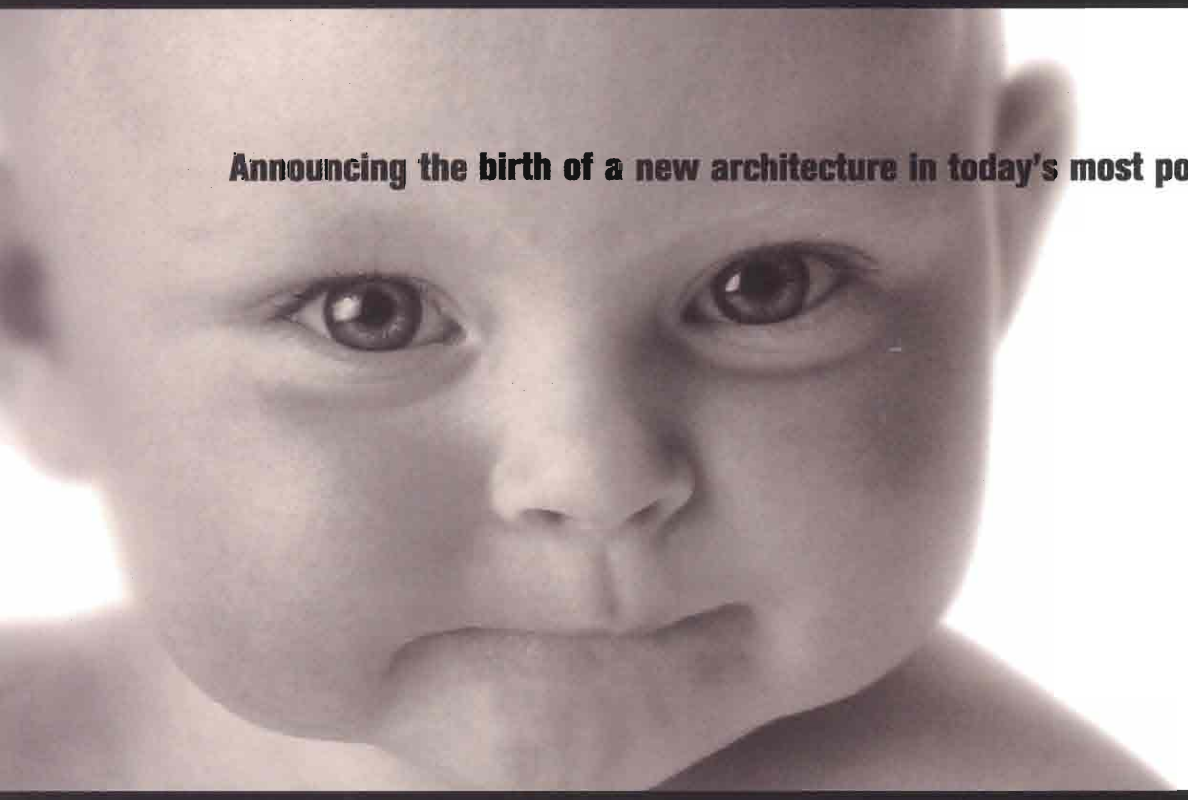

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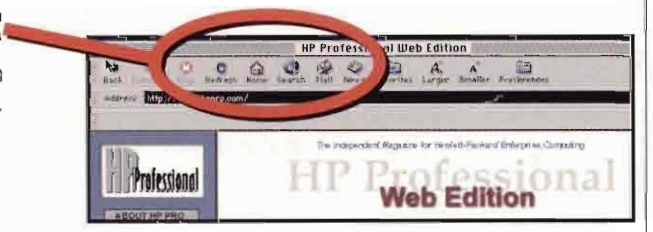

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For address changes and other subscription information: hp@omeda.com or call (708) 291-5212 or FAX (847) 564-9002. In the U.S., missed issues must be claimed within 45 days of publication date; outside the U.S., missed issues must be claimed within 90 days. Editorial, advertising sales and executive offices at 1300 Virginia Dr., Ste. 400, Fort Washington, PA 19034 • tel: (215) 643-8000, fax: (215) 643-8009.

HP PROFESSIONAL (ISSN 0896-345X) is published monthly by Boucher Communications Inc., 1300 Virginia Dr. Ste. 400, Fort Washington, PA 19034. Subscriptions are complimentary for qualified U.S. and Canadian users. Periodicals postage paid at Fort Washington, PA 19034, and additional mailing offices. **US POSTMASTER:** Send all correspondence and address changes to HP PROFESSIONAL, P.O. Box 3055, Northbrook, IL 60065.

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Canada Post International Publication Mail Canadian Distribution Sales Agreement #IPM0264431

Printed in U.S.A.

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Keeping Secrets

George A. Thompson
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ARE YOU STILL waiting to see the solution that downsizing, consolidation and information technology has wrought at your organization? Are the so-called higher-ups just hiding out? Is the new corporate reality closer to the seat of your pants than to the seat of your passion?

If you've been wondering lately (assuming you have the time) what separates the best from the baffled, then you might want to peruse Geoffrey James' *Success Secrets From Silicon Valley: How To Make Your Teams More Effective* (Random House, 1998). Although I'm not easily impressed by trite how-to management tomes, this one struck a bit of a chord. Not because there were any keen insights, but because HP figured prominently.

STICK WITH THE FUNDAMENTALS

I didn't have to go any farther than page six to find out that HP was the first to emphasize the use of first names as corporate policy back in *1939*. In fact, James credits HP with the creation of the Silicon Valley culture. "Rather than building a corporate machine, they created a community of individuals, held together by a profound sense of mutual respect." From my experience, that's as good a description of HP's rank and file as any. It's also just as true of HP executives that I've met and at times have come to know in my five years of covering the HP computer community.

HP, more than any company, understands something fundamental about the rules or corporate culture which govern a corporation; that is, how they should work. While many executives may talk about their corporate cultures, it's primarily lip service. At HP, James summarizes it this way, "Dave [Packard] and Bill [Hewlett] articulated that managers should set objectives, but give employees great freedom in the way those objectives were to be accomplished."

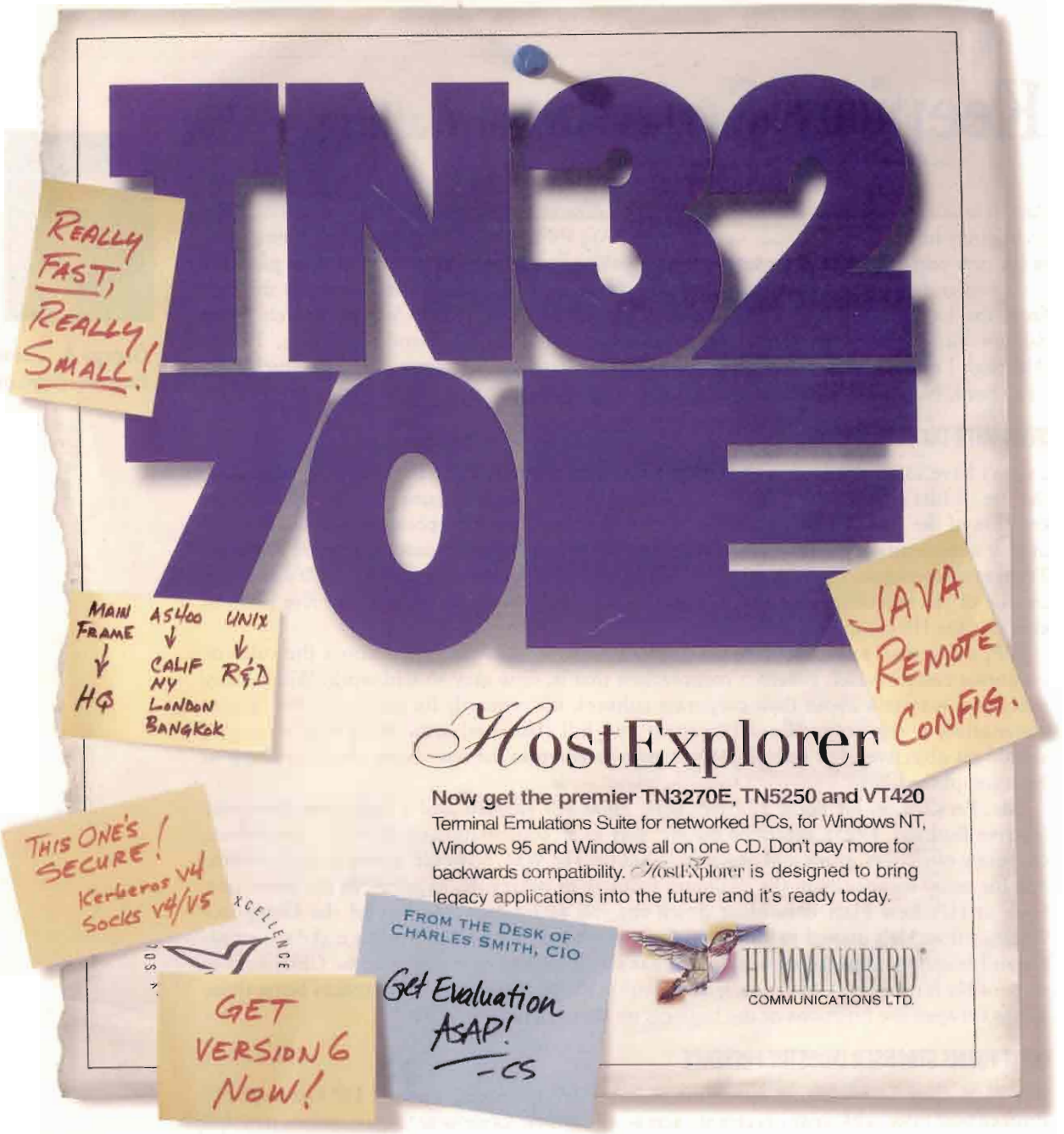
Mr. Packard, in his book *The HP Way: How Bill Hewlett and I Built Our Company* (Harper Business, 1995), described the HP Way as a "combination of elements - our values, corporate objectives, plans and practices." Yet the HP Way, however, seems to remain difficult for many companies in the computer industry or otherwise, to grasp. In the meantime, back at HP, Lew Platt is holding down the job as interim manager of the Computer Organization. He's quoted in James' book on the role of the CEO: "[it's] to make the invisible visible and manage the white spaces. That's a clever way of saying that the CEO is really responsible for the sense of connectedness within the company, the white spaces being those things between the functions or the business on the organization chart."

PLATT FORMS STRONGER INDUSTRY PRESENCE

Mr. Platt must be managing more just than the white spaces, because HP has kept *HP Professional* busy with announcements across all of their Computer Organization: new HP OpenView products, their aggressive push with Java, their expanding alliance with Cisco, new PC workstations, a new line of portable computers, their improvements in their third-party relationships. And let's not forget the pending Merced CPU. Then, toss in an aggressive push in the E-commerce, ISP and Internet spaces. And for an encore, HP's the technology supplier for the World Cup, which starts this month (see our story on page 20).

There's more to *Success Secrets* than HP. But if you're part of the HP community and want a better understanding of what HP is all about, then think about picking up a copy. So, if you can find your CEO, first, be thankful for small favors. Then hand-over your copy of *Secrets*. Hopefully, it won't be a secret anymore.

To an IT manager, this is a pin-up.



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When The Merced Overflows

Bruce I. Sachs
President and CEO
Stratus Computer, Inc.

WHEN 32-BIT CPUs made their debut customers for the first time could meet all their current business challenges and address hitherto unattainable opportunities. They could function effectively. Nonetheless, customers continue to look past the functional present to the attainable future. So, it's now time for 64-bit architectures.

Once regarded suspiciously as overkill, suitable only for mega-installations like NASA, federal governments or world banks, 64-bit CPUs are seen as cost-effective gateways to the future. HP's recent announcement to deliver a 64-bit HP-UX operating system to run on Intel IA-64 has changed the rules of engagement for IT professionals and for those who would provide open platforms alike. Practical reality has redefined the market and customers realize that the need for 64-bit computing is becoming, in many cases, a requirement for doing business.

MIGRATION MATTERS

In the era of today's more sophisticated decision maker, the NASA analogy no longer holds water; a string of auto parts stores linked by a common 32-bit based operating environment, for example, could run out of address space. The challenge faced by IT professionals and platform vendors throughout the world is straightforward: find a migration path.

By the year 2003, the Gartner Group predicts that 70 percent of ISV's will actively support only one UNIX system. HP-UX is already well positioned to be the UNIX of choice and the IA-64 CPU architecture provides the headroom our customers require for future growth. Third-party applications that run on platforms that are already based on HP-UX and 32-bit PA-RISC will be completely compatible with platforms that Stratus will develop based on HP-UX for IA-64. The migration path has already been built in, and it's elegant in its simplicity.

By working with HP, we can now provide customers in areas as diverse as telecommunications, financial services, healthcare, insurance, retail sales and transportation with an open, continuously available platform, based on world-class hardware and software to meet the dynamic challenges of business critical systems. This guarantees our customers investment protection, a migration path to higher performance and access to a growing ISV software portfolio with more than 15,000 applications.

CONTINUITY PLUS

There are "best of both world" advantages for customers who currently base their business on the HP PA-RISC. They can remain on their current platform and invoke the security of continuously available computing, while they evaluate the business case for seamless migration to the HP-UX/IA-64 environment.

UNIX continues to be the primary presence in the enterprise market, with a strong reputation for scalability and reliability. As demand for real time access and full time reliability escalate to a round-the-clock reality, customers continue to move to the UNIX space. The move toward UNIX has been spurred forward with the development of the IA-64 chip and Intel's market power and presence.

We believe that there is a real synergy achieved by combining HP-UX with IA-64 technology and our continuously available, open platform because it meets the needs of even the most demanding users. Most important, our customers now have the long awaited "Yellow Brick Road" to the future: a migration to 64-bit computing.

AT PRESS

HP Endorses nFast Cryptographic Accelerators

In support of their new e-commerce platform, HP Domain Commerce (see *E-News On E-Commerce* on page 8), HP will begin reference selling nCipher, Inc.'s nFast line of cryptographic accelerators to its worldwide customer base.

HP is targeting Domain Commerce as a transaction-intensive Internet commerce platform and sees nFast as the perfect complement that they hope will improve server performance by speeding up secure electronic transactions. nFast's SCSI interface allows the connection of up to seven units and is compatible with several standards including SSL and SET. It also provides infinite key storage and can include recovery features that meet government export criteria for worldwide availability.

More information is available at www.ncipher.com.

Firehunter Gets Lean

HP is delivering HP OpenView Firehunter/L, a full-featured, entry-level version of HP OpenView Firehunter. They're calling it "the lean machine" and claiming it as the industry's first sub-$5,000 end-to-end service management solutions for ISPs.

With an entry price of $4,995, Firehunter/L is designed to allow ISPs with fewer than 5,000 subscribers to monitor and manage their operations, specifically e-mail, news and Web-hosting more efficiently. For more information go to www.firehunter.com.

HP BRANDED TOPS IN TECHNOLOGY

HP narrowly edged out 3Com and Microsoft as the leading brand in the U.S. business technology market according to a recent study called "The Power of Simultaneous Branding 1998" done by CMP Media, Inc. (Manhasset, N.Y.) and Interbrand Inc. (New York, N.Y.).

Over 6,400 interviews with IT professionals comprised one of the largest technology branding studies ever conducted, and the only one that studied both enterprise and channel markets. The objective was to determine brand equity, the drivers of purchasing decisions. CMP Media wants to push technology companies to align their brands with the factors that motivate buyers.

Brand equity, according to Jonathan Hilland, research manager for CMP Media, is determined after asking subjects not only what products they buy, but why they buy. No vendors were suggested to the subjects, and through a series of questions designed to measure the importance of attributes like reliability, dependability, compatibility and trust, purchase behaviors were determined.

Statistical wizards then performed their magic with tools like regression analysis and correlation models to determine a final standing in each category. HP scored at the top for laptops, mid-range servers (more than one processor), desktop PCs, PC servers (single processor) and network laser printers. They finished a close second behind 3Com in Networking Hardware.

MOVE UP TO MERCED

HP has announced a program that will allow customers to trade-in old systems, or upgrade to either an Intel Merced or Deschutes processor.

"Our investment protection program on the 9000 is very successful," says Andrew Bakonyi, HP's business development manager for the Enterprise NetServer division. "Now, customer demand for an upgrade path has grown as NetServers move up in the enterprise."

Bakonyi explained that customers can trade-in systems bought before January, 1998 from any top-tier vendors like Compaq, Dell, IBM or Sun at "greater than fair-market value and receive a brand spanking new NetServer" in return.

For NetServer LX's bought since January, 1998, customers can purchase an upgrade kit that is essentially a new server without CPUs, memory or drives. They then populate that machine with components to their liking, and either Merced or Deschutes processors from Intel once they are available. Finally, HP sends them a rebate that helps offset the cost of the upgrade kit.

This, according to Bakonyi, accomplishes two things: customers can redeploy older NetServers and old and new servers can run in parallel, providing for a smoother migration.

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WRQ Wants You!

Wanna be a beta? If so, WRQ wants you. They are currently seeking technical evaluators for their Software Preview Program.

Evaluators will review upcoming releases of Express Meter, Reflection for HP, Reflection for UNIX and Digital and Reflection for IBM and EnterView, a new Java-based host access product.

Participants get the opportunity to put the software through it paces and give direct feedback to WRQ's product development teams and thereby have affects on the development of future WRQ products.

If you're interested, contact your WRQ Business Partner or contact Jackie Clough at WRQ at (888) 215-2626 or (206) 217-7106.

"If the automobile had followed the same development as the computer, a Rolls-Royce would today cost $100, get a million miles per gallon, and explode once a year killing everyone inside."

-Robert Cringely/InfoWorld

Hey, Loosen Up Out There!

Stiff? Aching muscles? Maybe you're spending too much time at the keyboard without enough exercise breaks. Ergonomists have long believed that one way to prevent repetitive stress injuries is to take frequent short breaks and do stretching exercises.

Stretch Break, a new Windows-based program designed by a team of health-care professionals, pops-up at regular intervals with anima-

E-NEWS ON E-COMMERCE

HP wants to teach you "How to Succeed In E-Business." At the recent forum of the same name, they announced several new offerings designed to do just that.

First is their Web Quality of Service (Web QoS) strategy to differentiate their e-business solutions from competitors like Sun and IBM. The technologies expected from this plan will be designed to reduce unexpected "World Wide Wait" on the Web, help systems predict wait time and communicate it back to the user, allow businesses to provide premiere services to their best customers and prioritize services like online banking ahead of lesser functions like browsing.

Part of the strategy is the new HP Domain Commerce, an HP 9000 server optimized for deploying Internet commerce applications. It includes: ServiceControl for peak-usage management and management of user and service classes; Domain management for central browser-based management of network and e-commerce applications; OpenPix imaging software for viewing, sharing and printing of high-resolution images; High Availability preconfigured for use with MC/ServiceGuard; and VirtualVault as an option for a secure runtime environment.

HP also announced several new related collaborations. Web QoS will get help from Cisco Systems, Inc. who plan on delivering the same predictability for Web transactions on their networking products as HP is offering on enterprise systems. Next, a partnership with AT&T will offer a bundled firewall that includes systems, software and services. Finally, OpenView's Firehunter is integrating with Keystone's Perspective service which measures user-perceived performance and accessibility in an attempt to provide an end-to-end real-time picture to ISPs of their Web-hosting services and equipment.

PEOPLESOFT DELIVERS VERSION 7.5

PeopleSoft, Inc. (Pleasanton, Calif.) conducted a gathering of the IT media tribes at a gala unveiling/testimonial/luncheon in New York City recently to announce PeopleSoft 7.5, the newest release of their industry-leading enterprise application suite.

Keynoting the affair was Dave Duffield, PeopleSoft's president and CEO. "PeopleSoft 7.5 covers all the bases," he said. "It will enable our customers to automate their full range of business processes on a worldwide basis."

Globalization is at the core of the new product. New features include global manufacturing and supply chain management, support for the European Economic and Monetary Unit, (EMU), international accounting practices and a European Payroll Application.

"Across the board, we enhanced our applications," says Rob McKelligan PeopleSoft's vice president for product strategy. "This is a major product release. The big themes would be global capabilities, and our distribution, manufacturing and supply chain applications. And we continue to beef up our capabilities on the financial and HR side as well. "

McKelligan commented on the component architecture of the new release that allows for re-use of modules in more than one business process. "It's a business analyst type of person that can actually modify the application," he says touting the ease of customization. "You don't need a programmer."

HP has been both a PeopleSoft customer and partner since 1992, using Human Resource and PeopleSoft's Red Pepper supply chain management software in the Test and Organization.

"Hewlett Packard has been working with them to help do things like performance characterizations of the box, help them define the bundles they would be using in different industries and be able to get that into a distribution model," says Joe Pacella, HP's Americas ERP Manager. "Now we're going to form a whole organization to do that."

Pacella explained that HP is building an "Application Solution Center" for PeopleSoft. "We'll be working with Cisco, with Informix, with Oracle and Intel and producing solution centers that will be resident right at [their] headquarters in

California." The center will be staffed and maintained by HP personnel (with contributions from the other partners) in a space provided by PeopleSoft. While HP has worked with other ISVs, notably SAP, in building on-site testing and optimization centers, PeopleSoft is the only one to take a full end-to-end approach. "It's not just the platform, it's the whole tool solution," he added.

"I think what they're doing right now fits in really well with our global approach and our global customer base," says Pacella summing up HP's take on the PeopleSoft announcement. "It's a very tight synchronization with what we've got planned."

STRATUS CONTINUES WITH HP-UX FOR IA-64

Stratus Computer, Inc. (Marlboro, Mass.) has strengthened their already robust relationship with HP in several ways.

First, they've announced their commitment to HP-UX as the operating system on their implementation of the HP and Intel jointly-developed 64-bit processor, IA-64. Third-party applications that run on Stratus' current line of fault-tolerant Continuum Series systems, which are PA-RISC, HP-UX-based now, are completely compatible with the company's next generation platform. That, according to Laura

Mayo, Stratus' director of Stratus and HP-UX marketing, gives their customers an "investment protection program."

Mayo went on to explain that Continuum users will be able to run their systems with the current PA-RISC processor in parallel with the IA-64. That, she says, will allow for a smoother migration path as customers realize the need for faster, more robust applications. With complete binary compatibility, that migration can be done with no need to re-compile.

Second, Mayo described a more aggressive joint marketing effort that will be undertaken between the two firms. Stratus has long been known for an adherence to high availability systems, HP for the scalability of theirs.

Recognizing the opportunity to present a combination of those architectures as the best-of-all-worlds to perspective customers, they have announced an integration of theirs sales and marketing efforts.

Under the new arrangement, HP sales representatives will receive compensation for selling Stratus platforms to customers who need a high-availability solution. The corresponding Stratus representative will also receive credit for the sale. This, according to Mayo, will allow HP to increase their presence in markets like telecommunications where Stratus is already strong, while opening up new potential for Stratus boxes.

DEPLOY GLOBALLY, ACT LOCALLY

Announcing the first globally-deployed channel assembly program, HP has added 10 U.S.-based distribution partners to its already successful initiatives underway in Europe and Asia. The program benefits customers with on-demand configuration flexibility and competitive prices, and enables channel partners to streamline inventory forecasting and speed inventory turns.

Last fall, HP announced their Extended Solutions Partnership Program, a massive supply-chain re-engineering effort aimed at slashing PC inventory costs for partners and delivering higher value and faster turnaround for customers. The new program is the next key building-block in that initiative.

The new U.S.-based partners include industry stalwarts like CompuCon Systems, Ingram Micro, MicroAge, GE Capital Information Technology Solutions and Merisel Corporation.

HP says the program encompasses Brio PCs and Vectra corporate PCs and it plans to add Kayak PC Workstations later this year with OmniBook notebook PCs and NetServer systems in early 1999.

news threads

tions of a series of stress-reducing stretches that have proven to be effective in reducing stiffness and muscle aches. It also helps raise a user's awareness of ergonomic issues like the setup of workstations.

Single user licenses are $44.95. A full-featured evaluation version is available for download at www.paratec.com.

Sound-Off Online

The Business Software Alliance (BSA) is sponsoring online discussion forums that feature industry leaders including company CEOs, members of Congress and other key policy makers. Topics will focus on issues from Internet taxation to encryption policy reform.

The current forum runs through the end of June and its topic is encryption policy reform. To participate, logon at www.bsa.org/policy, post your concerns to any of the guest speakers and check back to the site later for responses. Speakers will post final thoughts and conclusions at the end of each forum.

How Low Can They Go?

Prices, we mean. Apparently still lower, as HP announced sweeping price cuts on their Brio and Vectra PC lines.

Brio PCs, which start at $799 have been reduced up to 15 percent. A street price of $1,399 gets you a 300MHz Pentium II processor, 32MB SDRAM, a 4.0GB hard-disk, 2MB VRAM, Windows 95, networking software and advanced features for remote support, virus scanning and diagnostics.

The same $1,399 buys a Vectra VL PC with a 266MHz Pentium II, 32MB SDRAM, a 4.3GB SMART II UltraATA hard-disk, Cirrus Logic Laguna 3D AGP graphics and a 24X MAX CD-ROM drive with 16-bit sound.

Go even lower, down to $1,199 and you can get your hands on a 233MHz Pentium II, 32MB SDRAM,

a 3.2GB SMART II UltraATA hard-disk, Cirrus Logic Laguna 3D AGP graphics and Windows NT 4.0 pre-loaded Vectra VL PC.

HP Fraud Cops On The Case

Fraud costs telecommunications service providers $12 billion a year. With that staggering sum in mind, HP is stealing a page out of Bell Atlantic's anti-fraud policy by starting their own fraud-management consulting program and pirating away a Bell Atlantic executive to spearhead it.

The program provides fraud audits, business-case development and fraud-center consultation and training. Mary Chacanias, former director of fraud prevention for Bell Atlantic and a leading fraud authority for 28 years, captains HP's force. A Certified Communications Security Professional (CCSP), Chacanias was responsible for Bell's "Alliance to Outfox Phone Fraud" campaign.

HP's hopes to build on their acceSS7 real-time network-monitoring and data-collection expertise and give customers the ability to detect fraud on a real-time basis, allowing them to prevent losses, reduce bad debt and catch network abuse.

NT To Ship With OpenView Agent

Windows NT 5.0 is taking an OpenView into network management. HP has announced that an OpenView Web-Based Enterprise Management (WBEM) agent will ship with every copy of the new Microsoft operating system. This marks the first time an OpenView component will be available directly from an NT CD-ROM.

The ManageX-based agent monitors both Windows NT 5.0 and 4.0 applications, system and security event logs and WBEM management data, based on the two policies supplied. The agent and policies, combined with the HP OpenView ManageX full product, will enable users to manage thousands of NT systems from a central console.

HP TO DELIVER INTERNET DEVELOPMENT FOUNDATION

HP wants to be the father of an enterprise Internet solution that combines mixed UNIX systems and Windows NT environments. If so, then Domain Foundation Tools and FoundationWare, products and technologies designed to unify and simplify Internet application development and deployment that will be available this fall, just became a twinkle in father's eye.

HP expects this unified solution to reduce the confusion over technology alternatives and require less equipment and training time for developing and deploying new mission-critical e-commerce, supply-chain and online customer support Internet applications.

Foundation Tools components will include: **HP OpenStudio** - NT-based development tools used with Visual C++ to create UNIX applications, **Foundation Wizards** - fill-in templates for use with Internet middleware, **Software Development Kits** - supplied by industry-leading vendors for developing applications with FoundationWare, **HP-UX Edition of JavaWorkshop by Sun 2.0** - tools to create Java applications for Sun 2.0 enterprise Internet application.

FoundationWare components will include: **FoundationWare ORB** - provides IONA's Orbix, a CORBA-compliant Object Request Broker which is a cross-platform infrastructure for creating and deploying object-oriented Internet applications, **FoundationWare Directory** - uses Netscape Directory Server software, an Internet application directory based on LDAP v3, an Internet standard for directory services.

In addition, to complement the announcement of these new offsprings, HP is expanding the Developer's Edge program for partners that provide key products for HP 9000 Enterprise Servers.

Keep your eyes on this space for more information as we move closer to the delivery.

HP'S NEW NETSERVER LH 3

HP claims their new NetServer LH 3 system is the industry's first to combine Intel's new 350MHz and 400MHz Pentium II processors, redundant component design, integrated disk-array controller and new high-performance Ultra2 disk drives for less than $5,000.

The new HP TopTools Remote Control Card and HP OpenView ManageX/SE, for managing the server either remotely or locally, are included with the NetServer LH 3. This combination of tools allows operators to monitor and manage hardware, software and applications to provide continuous operation.

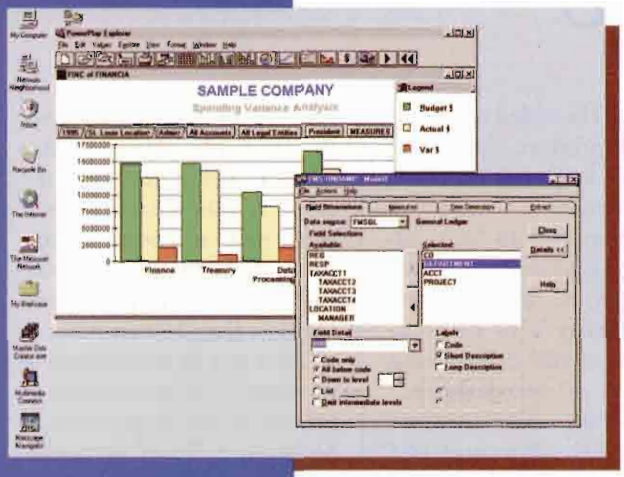
"The NetServer LH 3 system addresses one of the toughest challenges for IT professionals — being able to anticipate and plan for growth," said Eileen O'Brien, marketing manager, HP's Commercial NetServer Operation. "This solution is the first to bring high-end features to the midrange area."

Highlights of the new server include:

- World's best mid-range performance-details on product and application (benchmarks available at http://www.hp.com/go/netserver);
- Tool-free upgrade to four-way multiprocessing;
- Support for 12 internal hot-swap drives (maximum storage of 144GB);
- Integrated dual-channel HP NetRAID controller with I20;
- New HP TopTools Remote Control Card with a browser-based interface for emergency remote access by LAN or modem;
- HP OpenView ManageX/SE;
- Standard Ultra2 SCSI (LVD) drives;
- HP SureStore DAT 24x6i autoloader (optional);
- Two new families of Rack Enclosures — HP Rack System/E and HP Rack System/U.

Year 2000:

Time is Running Out on Your Financials!



The next millennium is approaching fast, and you're thinking that it's too late to solve the year 2000 problem by acquiring new accounting systems. Well, you're wrong.

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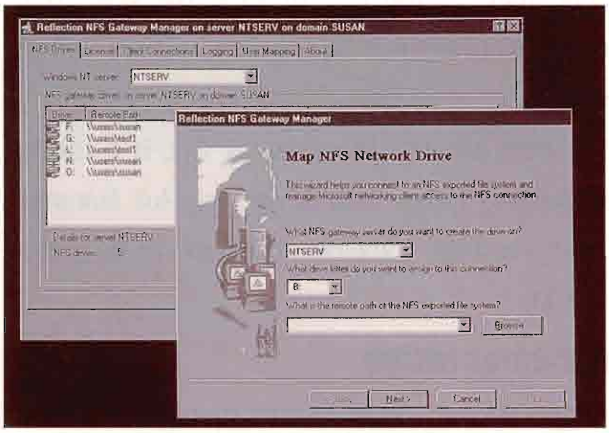
NFS Gateway Magic



NFS GATEWAY 7.0

- Redirects resource share to allow NFS UNIX file access through NT-based gateway server
- Requires NT Server 4.0 (Service Pack 3 recommended)
- Pricing: Concurrent 10 users - $1,800, $180 per user thereafter; per Seat 20 users - $1,800, $90 per seat thereafter

WRQ, Inc.

1500 Dexter Avenue North
Seattle, WA 98109
tel: (206) 217-7100
fax: (206) 217-0211

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Magicians use redirection to get their audience to look one place while they pull off their slight-of-hand somewhere else. WRQ, Inc. (Seattle, Wash.), while not trying to fool anyone, uses redirection to pull off the magic of seamless integration between Windows clients and UNIX servers with their new, and first server-based product, NFS Gateway 7.0.

"We redirect a redirected share," says David Hebert, WRQ's product marketing manager for NFS. "We take a redirected share to the NFS NT server and redirect it again to the UNIX server." That, he explains, allows the client to see nothing more than an additional drive designation (one that is, in actuality, pointing to the UNIX server) from their desktop. He added that, as a gateway product, there is no software to install on client workstations.

"We wanted to focus on IT management. So, we added more management functionality with no complicated UNIX networking products on the desktop." That allows administrators to centrally administer and customize the product without ever touching a user PC.

Additional features include: automatic file name resolution between UNIX and NT; support of Sun's Network Information Service (NIS); file management with Reflection NFS Utility; graphical Ping application; network event viewer; support of NFS version 3; NFS directory and file caching and file locking; and file sharing which prevents simultaneous reading and writing.

Customization tools like NFS API which can be called from C, C++ or Visual Basic applications, RPC API for remote procedure calls and NFSnet utility for more resource mapping options other than "net use" allow programmers to match NFS Gateway to a particular environment.

Jay Zimmett, director of IT for Applied Micro Circuits Corp. (San Diego, Calif.) uses NFS Gateway to give design engineers access to UNIX files. He touts the product's installation wizard. "It was basically click next, next and some minor manual changes, and it was in." Total setup, he said, was less than 10 minutes.

As a test of the gateway's prowess, Zimmett devised a scheme where he exported a file from a Novell server to a Sun server using Novell's NFS Services. He then mapped client workstations to that UNIX box using NFS Gateway and allowed those users access to the file. "It did a full 360 with no problems."

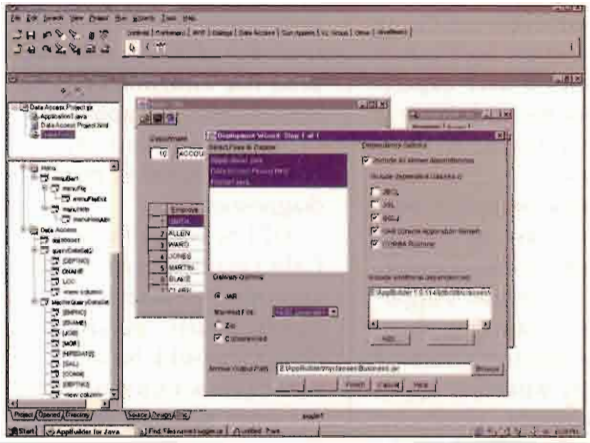
Asked what he might like to see added, Zimmett said he might want a few cosmetic changes like adding more stats, but over all "functionality-wise, it works great."

He closed by saying WRQ's "beta product worked better than most people's production software."

NFS Gateway requires Windows NT Server 4.0, with Service Pack 3 recommended. A concurrent 10 user configuration sells for $1,800, $180 per seat thereafter.

Ken Deats,
Associate Editor

Banking on Java Apps



APPBUILDER 1.0

- Component-based development tool for server-centric Java applications
- Supports standards CORBA, IIOP, SQLJ and JDBC
- Priced at $2,995

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Banking in the wild west was, at best, an adventure. Communications were sparse, towns were small, had few resources and were spread far apart. While Web-based applications didn't actually tame the west, they have made it easier to do banking business there.

Zoot Banking (Bozeman, Mont.), a division of Zoot Enterprises, is in the process of developing for small, remote banks a Java-based system that will provide those small-town financial enterprises with resource- and data-sharing capabilities. They already offer a home mortgage application system which allows an applicant to answer credit questions online and receive almost instant approval.

The foundation for these applications is Oracle Corporation's (Redwood Shores, Calif.) AppBuilder for Java 1.0. Steve Gertiser, Java development programmer and database engineer for Zoot Banking, says that his staff evaluated several other tools including those from Symantec, IBM and Microsoft, but "In our view, AppBuilder was the most integrated J development tool out there."

AppBuilder for Java is one element of Oracle's new JDeveloper Suite which also includes Application Server 4.0, Oracle8 Data Server and Symantec's Visual Page HTML editor. It is a reusable component-based tool for building two- and three-tier database applications for any JDBC/ODBC-compliant database, although, according to Sara Gardner, Oracle's group marketing manager for the Tools Division, "it is optimized for Oracle."

"We [licensed] the best Java IDE, which was Borland's JBuilder," she says, and then added database support and application support. "We didn't take anything away." Borland's product, Oracle felt, had the leading Java language technology, based on their byte code and JIT compiler, fine grained dependency checker and source level debugger. "We have nothing but respect for that IDE," added Zoot's Gertiser.

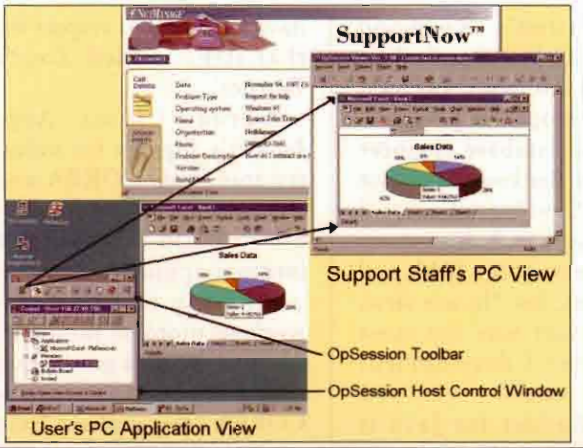
Gardner touts AppBuilder's support for industry standards CORBA and IIOP, which allow developers to build Internet and intranet applications without having to know networking protocol nitty-gritty. "Our Wizard generates a CORBA wrapper which is CORBA 2.0 compliant," she says.

The product also supports SQLJ which allows for embedding SQL statements in Java code, which are then "squirted out as JDBC," says Gardner.

Zoot's mortgage application took six weeks to complete with a staff of six. Asked what he would like to see added or changed, Gertiser reserved most of his comments for shortcomings in the standards not limited to just AppBuilder. "CORBA industry-wide is not that easy to work with," he says. "We'd like to see them wrap it in an easier-to-use environment." This, according to Gertiser, would make it more efficient for developers to park their code anyplace they want it and improve conversations between tiers.

Ken Deats,
Associate Editor

Software Support Hangs Up



SUPPORTNOW 2.0/OPSESSION

- Allows interactive, Internet-based application support sessions
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- SupportNow priced at $40,000 for SDK, one server, unlimited seats; OpSession priced at $85 per seat; SupportNow Server priced at $2,300 per server
- Viewers run on Windows 3.11/95/NT, UNIX and Java platforms

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tel: (408) 973-7171
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NetManage, Inc. (Cupertino, Calif.) wants you to hang up the phone. The phone you use for software support, that is. SupportNow and OpSession are two related products they say will do just that.

John Guertin, NetManage's senior product line manager, explains that users spend too much time describing what's on their PC screen to support personnel. With SupportNow, help-desk personnel use the Internet to set up a TCP/IP-based "support-channel" that "allows the support person remotely to get to the desktop problem."

One facet of SupportNow that Guertin says sets them apart from their competitors is the fact that the client initiates and is in complete control of the session. A SupportNow API is embedded in an application that enables a user experiencing trouble to initiate a support session with a mouse click.

Technical support personnel then have an interactive, real-time visual representation of the user's application. They can then share across the Internet, intranet or extranet whatever application screens, files and application-specific data the user allows them access to.

The record-and-playback feature allows staff to attach a session recording to a trouble ticket, and perform bitmap-based screen captures. The SupportNow server can reside either inside or outside a firewall and administrators have Web-based access for support (either Internet Explorer or Netscape).

OpSession is a stand-alone product loaded on every desktop. It is designed to support native Windows 95/NT applications including CAD/CAM and suite products like Microsoft Office 97 or Lotus SmartSuite 97.

OpSession follows custom support process steps and instructions from the SupportNow server, where the unique steps needed to support each application can be specified. A customization utility lets administrators define all pre-configured file attachments, registry, system and application information and dialog boxes that assist in problem diagnostics.

DPI Services (San Jose, Calif.) manufactures compliance management software. Traditionally, perspective clients would be sent an evaluation copy of their software through the mail. Sometimes, according to Carol Martinez, DPI's director of sales and marketing, the process of getting the disks to them, having them finding the time to load and test the software could take several months.

With OpSession, that process can now take minutes. "It enables our prospects to quickly view and try our software," she says. DPI tried Microsoft's NetMeeting, Martinez commented, but chose OpSession because, with the Microsoft product, "the user couldn't drive from their end."

OpSession has also been useful for Martinez in developing both an intranet and extranet customer training system. "It really lets us reach out to our customers."

Ken Deats,
Associate Editor

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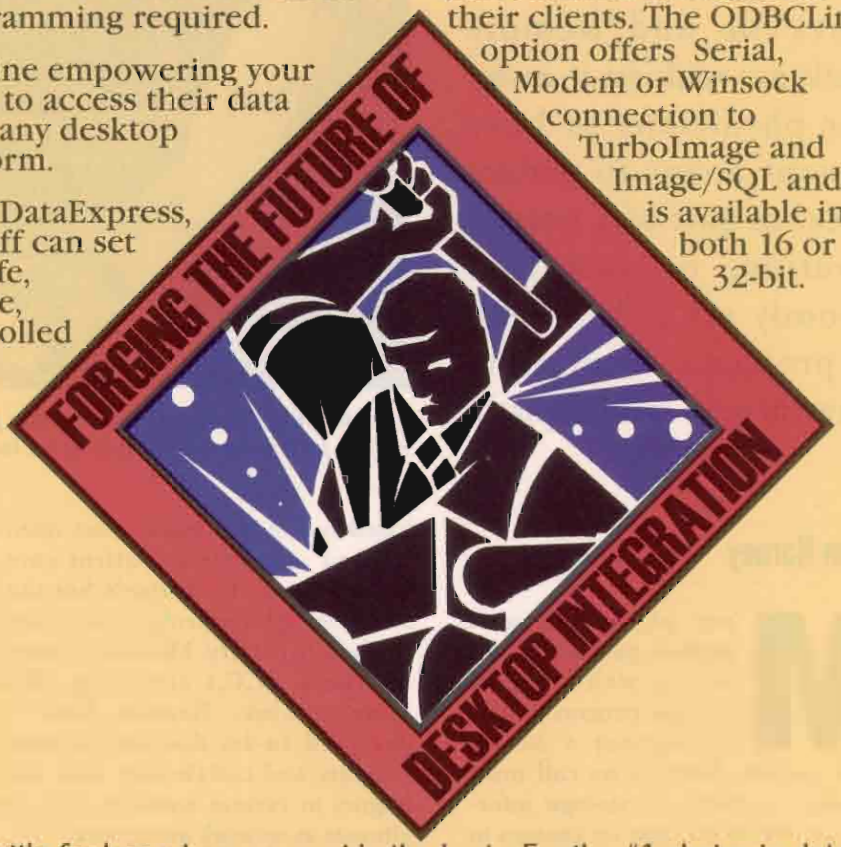
M. B. Foster Associates' ODBCLink/SE was chosen by Hewlett-Packard as the best solution available for their clients. The ODBCLink option offers Serial, Modem or Winsock connection to TurboImage and Image/SQL and is available in both 16 or 32-bit.



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A HP Prescription For Health Care

MOST DOCTORS STILL conduct their rounds by visiting patients in their rooms. HP products CareVue and Remote Link are making it easier for physicians to have instant access to patient data, as part of a normal routine, or instantaneously via a PC laptop if problems occur from anywhere in the hospital.

Remote Link is a system that lets Duke University's Dr. Meliones monitor and intervene in patient care, regardless of his location.

John Harney

Many physicians must perform periodic checks on the well-being of multiple patients located throughout a health care system. Doctors on-call must review a patient's physiologic information before deciding on changes in care. Independent practitioners like respiratory therapists often consult with several health facilities simultaneously and doctors routinely compare notes on similar cases in different hospitals to assure the best course of care.

THE DOCTOR IS ALWAYS IN!

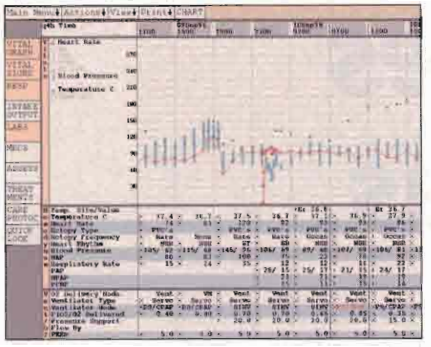
For example, HP's Medical Products Group (MPG; Andover, Mass.), developed Remote Link, a laptop-based system that lets doctors monitor and intervene in patient care, regardless of the doctor's hospital location. About ten physicians at Duke University Medical Center (Durham, N.C.) are using HP's Remote Link. Remote Link is designed to let doctors monitor patients and collaborate with colleagues in various scenarios. It's the ultimate in network integration.

Dr. John Meliones, chief of Critical Care Medicine and chief medical director of Children's Services at Duke University Medical Center must attend to children in the hospital's Pediatric Intensive Care Unit, the Neonatal Intensive Care Unit as well as the general hospital wards. Usually, medical school interns and nurses monitor the children in intensive care. If they notice fluctuations in a child's heart rate or blood pressure they page the child's doctor.

The doctor finds a phone, gets a description of the problem and accesses all of the child's medical records via HP's Remote Link. "You can be found at any time, look up data any time and look in on a patient any time," says Dr. Meliones. "This really improves the delivery of care. Simple problems are rectified remotely and you can always visit if the problem's serious."

CARING CONNECTIONS

While Remote Link is client-server software that runs on any Intel 486 or Pentium laptop client, it works together with another MPG-developed technology called CareVue, a monitoring network that provides *online* tools to improve documentation and integrate all aspects of a patient's medical record. In other



CareVue gathers, records and stores dynamic patient data and ports it to electronic forms, eliminating the need for manual transcription.

words, patient data is accessible throughout the medical enterprise.

Online Chart View

Duke's HP CareVue network provides docking stations in the three locations that Meliones visits where he uses a notebook computer to access them. He can download the latest data ported to the CareVue server from the patient's monitoring equipment, assess the situation and phone in any treatment modifications to the on-site caregivers.

CareVue provides specific applications in four key areas: documentation, care management, decision support and data management. Appropriate medical personnel can enter and access relevant data from the time a patient registers though their care and discharge.

CareVue's documentation applications model and improve current patient-charting systems. For example, via a medical device interface one application automatically gathers, records and stores dynamic patient data such as vital signs and ventilator settings and ports it as a flowsheet to electronic forms, eliminating the need for manual transcription. Other applications perform a variety of functions, from listing a patient's medication and dosages to updating the patient's record with test data from labs via an interface to the hospital's microbiology and radiology systems.

Care management applications help caregivers create comprehensive care plans across multiple disciplines as well as incorporate patient history and medical information obtained at admission. Decision support applications create tabular, event-line and graphical flowcharts that reflect aspects of a patient's condition and automatically calculates severity of illness scores based on systems like the Therapeutic Intervention Scoring System (TISS).

Opinion Please

The data management system features Oracle compatibility, so organizations can both assess all collected patient data to improve clinical practices as well as research it to create regulatory and insurance reports. If doctors want another opinion, they can share data and recommendations with other medical specialists at docking stations throughout the network.

Clinicians within or around the hospital check on monitored patients' physiological data like respiratory rate via the hospital's LAN or WAN. And, because CareVue is now Web-enabled, they can remotely access some data on the system over inter- and intranet links.

The CareVue system supports more than 20 file formats like Lotus 1-2-3, MS Excel and Word, runs on UNIX servers and Windows NT clients and costs from $20,000 to $29,000.

John Harney has been writing about information technology for 10 years and specializes in all aspects of document management.

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Remote Possibilities Become IT Realities

REMOTE USERS WANT REMOTE access both to and from their LAN. With a premium being placed on internal bus slots, data security concerns, servers sitting anywhere on the network and phone systyems anywhere in the world, are LAN-attached multi-ports the next big thing?

Vic Serbe

There are 2.5 ways to provide remote access to or from a network:

1.) put a full-featured dedicated remote access server on the local network;

2.) include remote access services on a pre-existing host by adding physical connectivity (usually serial ports and modems);

.5) add physical connectivity to a host providing remote access services, but by adding a network-based device with a true native serial port device driver.

Because internal bus slots are at a premium these days and it's very advantageous not to be limited by server location versus phone system location, having local ports on the network is very popular. Central Data, IBM and Corollary are a few of the providers of such connectivity, which are sometimes referred to as LAN-attached multi-ports.

One example of the LAN attached multi-port solution is the EtherLite Port Server from Central Data. Unlike HP's AdvanceStack Dial-A-LAN modules for remote access solutions, which are modules that plug into the expansion slot of HP's full-featured AdvanceStack 10Base-T hubs, it doesn't require a management PC to run the software needed to download the operating system and configuration information. Depending on the features included, the two and four port versions of the AdvanceStack products generally cost around $2,400-$3,100.

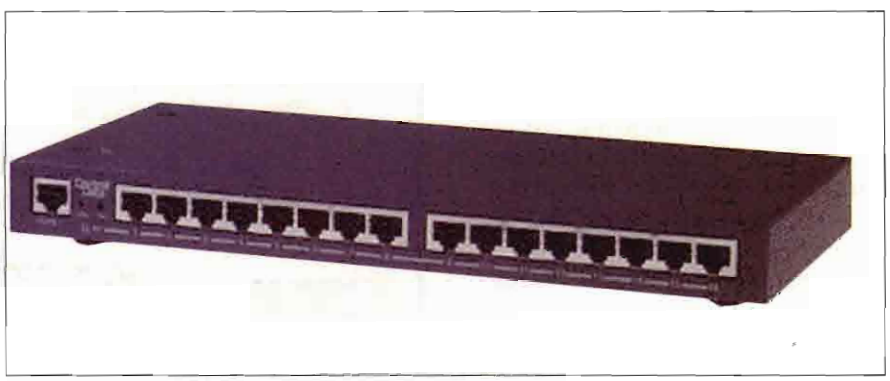
The EtherLite Port Server instead relies on host-based software to provide remote access services through its ports, but costs significantly less at $1,295 for 16 ports. It also doesn't require the presence of the AdvanceStack function.

HP's Dial-A-LAN products are special OEM versions of the LanRover Remote Access Server by Shiva Corporation (Bedford, Mass.), supporting standard high-speed modems as well as ISDN Terminal Adapters from Motorola, 3Com and Adtran.

Dial Up And Out

Remote access is usually associated with dial-in access to a local network, but local users can access remote resources as well. I call this dial-out remote access. Dial-out remote access usually involves use of port redirection server software running on the remote access server, providing connectivity to its local ports. The associated client software runs on the systems or clients (usually PCs) that use these ports. Whether inbound or outbound remote access, protecting the data stream with some form of encryption is very important (see sidebar).

Remote node provides a remote user with complete and comprehensive network access. And except for



Central Data's EtherLite Port Server adds 16 asynchronous ports at 115K baud with RJ45 connectors to TCP/IP networks.

VIRTUALLY SECURE REMOTE ACCESS

WHEN IT COMES to remote access, IT managers are concerned about security like never before. Remote access security involves not only making sure you are who you say you are (user authentication), but also protecting the traffic across the connection from being "snooped" for information, "spoofed," or "hijacked" midstream for unauthorized access (link/session encryption). A couple of popular methods of user authentication are RADIUS (Remote Access Dial-In User Service) and some form of TACACS (Terminal Access Controller Access Control System). There are many others, but these are probably the two most commonly used operating system independent types.

Protecting the data stream, in most cases, simply means using some form of encryption. This could be Data Encryption Software (DES), Pretty Good Privacy (PGP), Kerberos, or one of many other methods either publicly available or privately developed for a specific corporation. There are also hybrid implementations where certain parts of a connection are unencrypted, but then encrypted sessions may be launched on demand.

-V.S.

differences in performance, a remote client behaves the same as any system physically connected to the LAN back at the office. The remote machine is a full network peer. User applications typically reside on the remote system. File transfer and/or synchronization happens on demand and may be scheduled for when the remote access link is live and available. However, if an application doesn't support offline operation, much of this efficiency is lost.

THE NODE KNOWS

Unlike remote node, remote control doesn't support working in offline mode. The applications reside on a machine on the corporate net, but user input and/or screen output are redirected to the remote system. This can be very efficient, but will only function while the connection is live. Less data may actually have to traverse the relatively slow (remote access) network segment under remote control, but it relies on client-server applications or user interfaces, which may not always be available.

Sockets-based (database) communications and re-targetable graphics such as X11, rlogin, and telnet are examples of such applications. While remote disk mounts may also be supported, remote mounted disks using a remote access link are slow enough that one should only transfer information across that link when absolutely necessary. A good example of this would be to load a file from the server, operate on it, and then save it.

A bad example would be to run a database server where the database file was remote mounted, but the database server was local to the machine dialed-in. Knowing this, most administrators do it the right way and have the database server and database file(s) located on the same machine.

Remote access can also mean connecting two or more entire networks together. This can be done with any "on-demand" technology such as dial-up modem connections via public telephone lines, cable modems, ISDN, or even across the Internet. This is referred to as a Virtual Private Network (VPN) because the connection is virtually private over public connectivity. VPN's established across the Internet are based on secure data paths (tunnels) which allow safe transmission of data between two or more networks, not strictly associated with each other, via dedicated connection.

Vic Serbe (vic@cd.com) is an Applications Engineer/MIS/Webmaster at Central Data Corp. (Champaign, Ill.).

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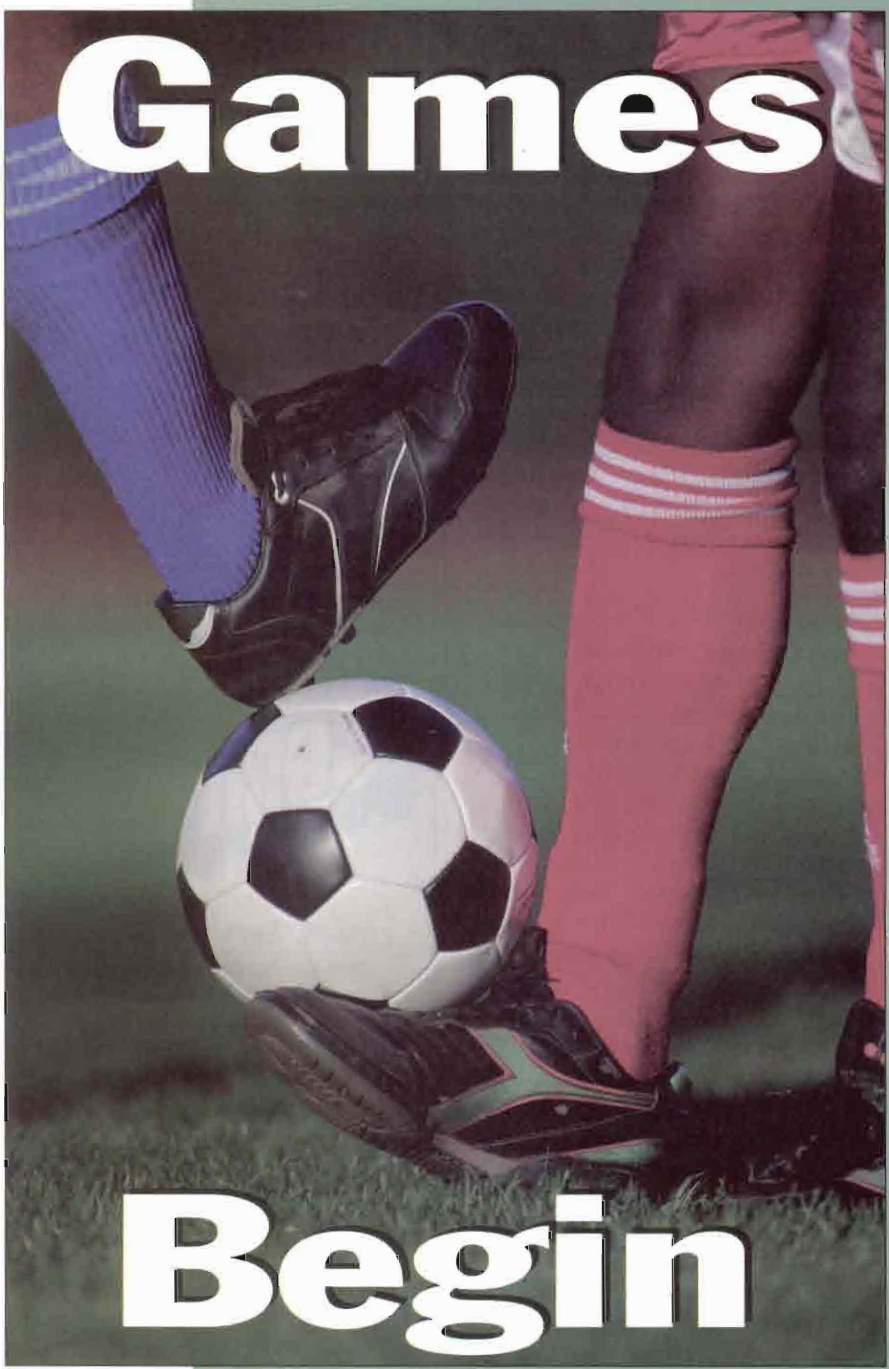


HP's IT Team Kick Off World Cup '98

Caroline Farmer

By the time you read this, the World Cup (taking place in stadiums all over France) will have begun in earnest. On the field the soccer team's athletes are being sorely tested. But, there's a lot of action off the field as well.

As the official technology supplier for World Cup '98, it's on the sidelines that the "athletic" prowess of HP's IT team will be tested. More than 75 members of the HP product team (especially HP computer systems) are providing the performance, integration, management and reliability to enable the overall World Cup information technology system to support the critical off-the-field applications. Events like accreditation,

accommodations, e-mail, media management, results and statistics, security, ticketing and reservations may not get much notice, but are still vitally important.

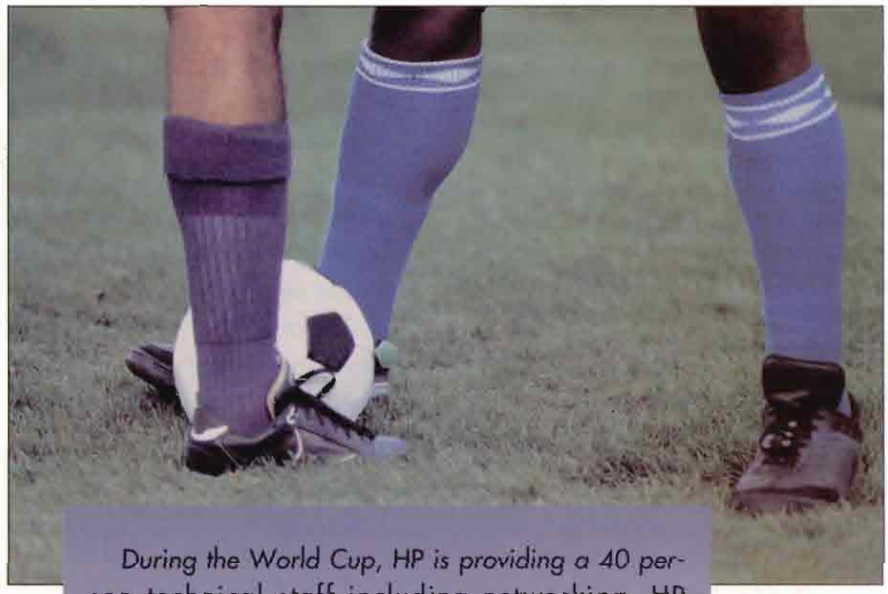
What's The Score

The HP IT team consists of EDS (Austin, Texas), Sybase (Emeryville, Calif.), and France Telecom (Paris, France). EDS is relying on SCORE!, its suite of events management software products (developed using Sybase System 11 and PowerBuilder) to plan and manage all logistics surrounding the World Cup. SCORE! includes staffing tools that allow the Comite Franais d'Organisation de la Coupe du Monde de Football 1998 (CFO) to manage the World Cup staff and 12,000 volunteers. EDS' SCORE! event-management suite is housed on a single server as part of a three-server HP MC/Service Guard Cluster that assures high availability.

One critical aspect of SCORE! is an accreditation system that, coupled with digital cameras and color LaserJet printers, is being used in the certification and badging of staff and other individuals during the 33-day period at the ten World Cup sites. The HP accreditation system provides security by granting access to all participants, including players, 9,500 journalists, officials, volunteers and CFO personnel.

The system includes definitions and management of all accreditation categories and access rights, as well as personnel identification and allocation of their individual access rights. During the games, the system will be used to produce over 100,000 badges. As soon as accreditation forms are registered in the database, badges are delivered to any of the ten venues or to the media center in Paris. HP provided the CFO with 2,000 Vectra VE PCs for use at accreditation stations.

The system allows CFO officials and volunteers to produce each badge in less than five minutes. This quick process enables journalists to gain easier access to stadiums and press centers and get down to the business of reporting on the matches. For players, coaches, and referees, standing in line to gain accreditation could be a safety and security risk, so the CFO created their badges before the games began.



During the World Cup, HP is providing a 40 person technical staff including networking, HP OpenView, and HP-UX consultants at each of the ten World Cup venues and in Paris. Divided into teams, they provide around-the-clock support. At their disposal is an HP-designed centralized management system that allows the consultants to distribute calls and quickly resolve problems.

SportsCenter Highlights

Five-minute "highlights films" are being digitized into broadcast quality MPEG-2 format, indexed and stored on an HP NetServer. Coaches and players use these videos to scrutinize their playing and analyze competitors. Journalists have access to the same video clips and can play them at any time using *InfoFrance98*, a secure intranet environment designed exclusively for use by the media.

The CFO is providing up-to-the-minute news, statistics, background and local information and match information (in English, French and Spanish) via *InfoFrance98*. This intranet solution provides journalists with the latest information via media centers at each of the ten World Cup venues, as well as at the International Media Center in Paris.

At the center of the World Cup Online system is the content engine, a cluster of HP 9000 Enterprise Servers that acts as a secure data repository for World Cup facts and figures, enough detail to keep even die-hard fans up to date on the minutia of international soccer. Information from the content engine is fed into *InfoFrance98* as well as the World Cup Web site.

The Domain Game

These HP Domain Internet solutions will be used during the entire tournament. This system records the main events during each game, including team composition, player exchanges, and goals and prints and distributes reports to the stadiums and press centers, and creates graphics for use by the broadcast media.

To ensure full security and guaran-

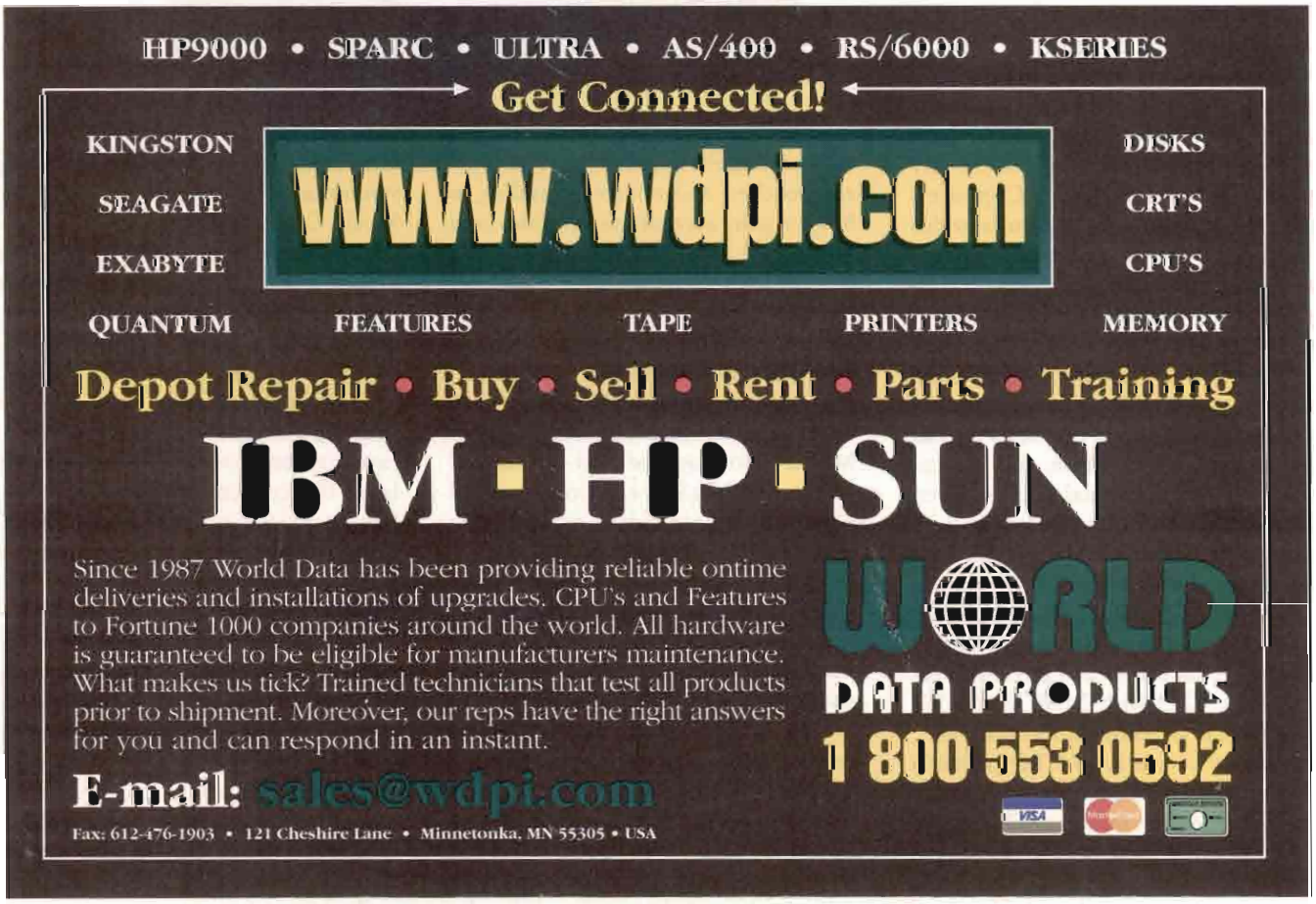
tee that only people with appropriate privileges have access to information, HP is also using its VirtualVault and smart card technologies. VirtualVault is a secure Web transaction server that is designed to safely connect enterprise applications and databases to clients on the Internet. VirtualVault is built on a security-hardened version of HP-UX, and is integrated with a Trusted Gateway Agent and Netscape Enterprise Server.

Well-Mapped Planning

To facilitate travel, transportation, and stadium logistics, the CFO uses a CAD system to create city maps, drawings of venue equipment, blueprints of buildings and rooms, and drafts of each stadium with detailed seat placement. In addition, the CAD system was used to plan sites for media functions, security, and medical facilities, as well as equipment and network planning. The foundation of the CAD system is a central database powered by an HP 9000 Enterprise Server that is networked to an optical jukebox. CFO committee members can access this database through HP workstations, Vectra PCs or X-terminals, and can print on large format HP printers. ◆

OPENVIEW IS SUITE ON THE WORLD CUP

Nearly every component of HP's OpenView suite is being used in the World Cup solution, according to Christian Hostelet, technical manager for the HP World Cup. OpenView network and system management tools allow the management of the clustered HP 9000 UNIX servers, including back up and restore with OmniBack and OmniStorage. OpenView allows remote management of the entire network. In addition, it plays a key role in simulating and demonstrating the high reliability the systems will need throughout the games.



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*Source: *CPAR*, January 17, 1998.
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Millennium Matters

	Costs Incurred Through 1997 (000,000)	Total Estimated Costs (000,000)	Percentage of Estimated Total Costs Incurred Through 1997	Company
Least Progress	$42	$565	7%	General Motors
Most Progress	$45	$100	45%	First Chicago NBD
Average Progress	$30	$146	21%	Largest 250 Average

How many of the largest corporations in the U.S. have NOT completed their Year 2000 computer assessment? According to a recent analysis of federal securities filings of the 250 largest corporations in the U.S., **60 percent have not completed their Year 2000 assessment.**

How long ago did most of these companies begin work on the Year 2000 problem? Two percent began before 1995; 28 percent in 1995; 35 percent in 1996; and 34 percent in 1997.

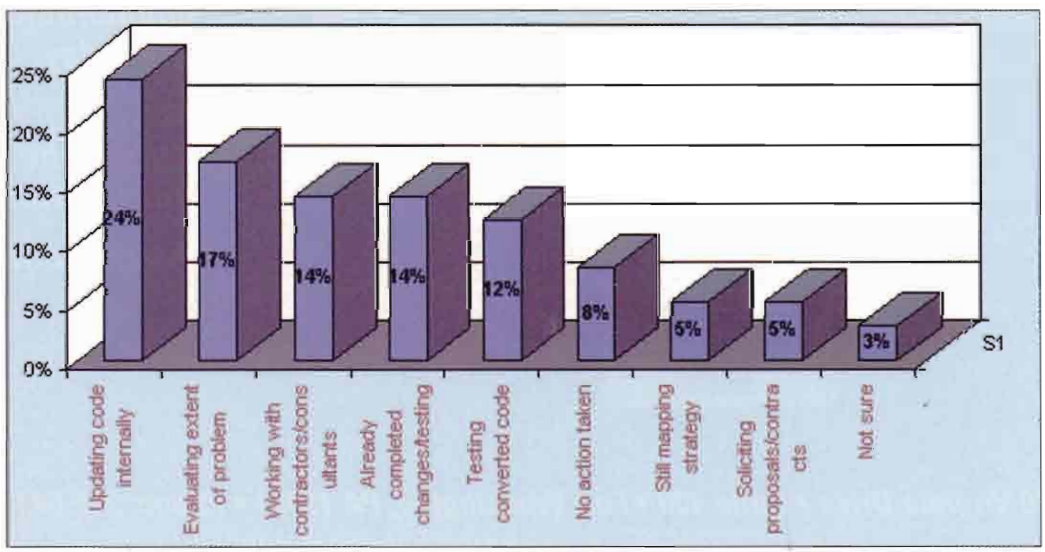
What is the total Year 2000 projected expenditures for these 250 companies? Projected expenditures are estimated to be at least $33 billion. Only 20 percent of that total has been spent to date. See chart below for breakdown through 1997.

How much overall progress has there been to date? Fifty-eight percent are in the first phase: the assessment of internal systems. Some 36 percent are in the process of converting at least some systems; and only 6 percent are in the process of testing at least some systems.

Have these 250 companies disclosed the problems and progress to their shareholders? Some 15 percent **did not** provide any information on their Year 2000 status. An additional 32 percent disclosed meaningless boilerplate language in their securities files to the effect that "based on current information" or "assumptions" they do not believe the Year 2000 problem will have a material effect on their business.

All answers taken from a study done by Triaxsys Research LLC (Misoula, MT) where researchers reviewed the 250 largest U.S. companies federal securities filings on the U.S. Securities and Exchange Commission's EDGAR database. For more information, email: triaxsys@aol.com.

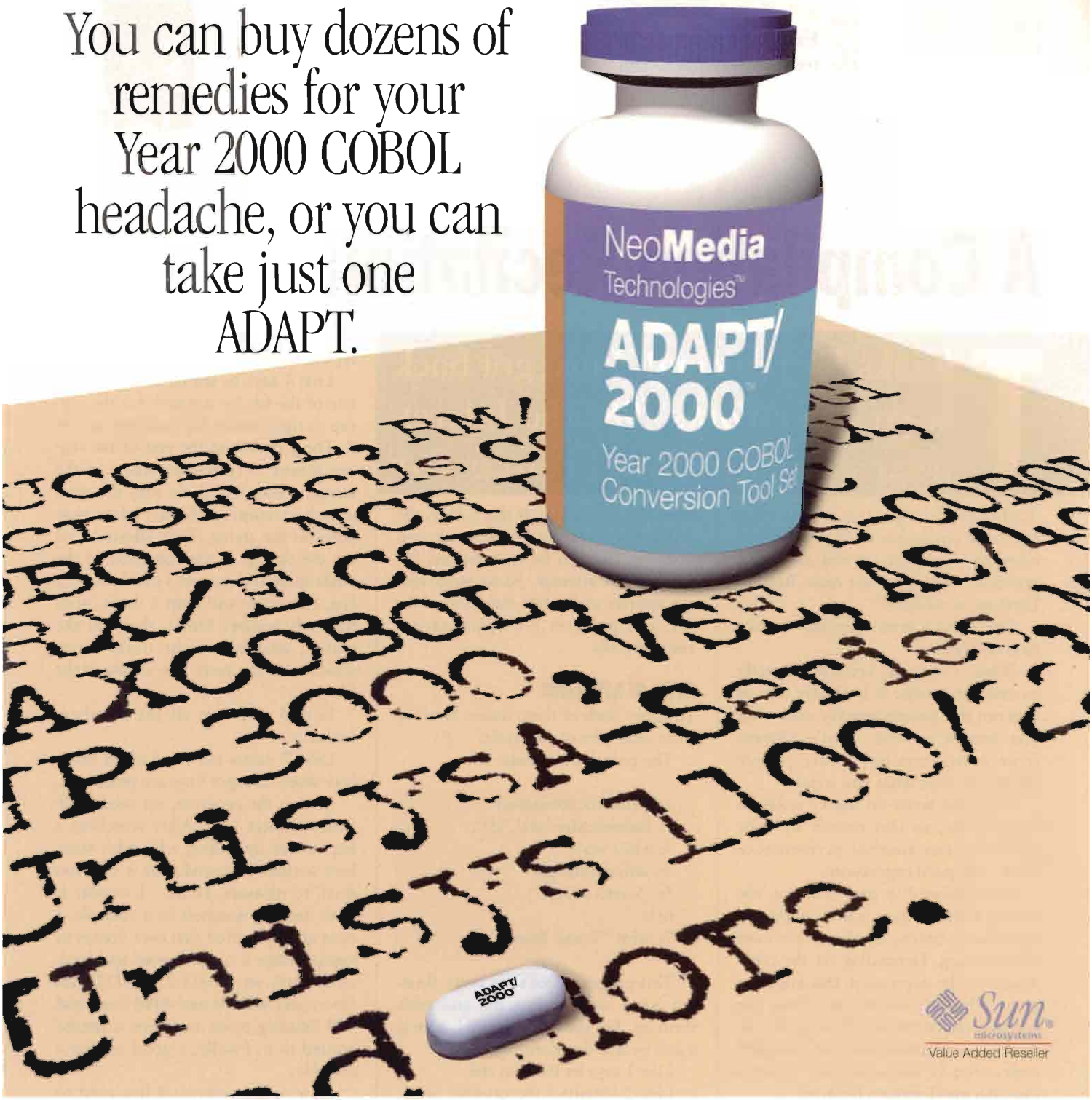
Y2K CONVERSION PROCESS OF HP PROFESSIONAL READERS



Surveys were mailed to 1,000 HP Professional *subscribers who identified themselves as managers.*
Source: BCI Research (March 1998).

YEAR 2000 SPECIAL REPORT

You can buy dozens of remedies for your Year 2000 COBOL headache, or you can take just one ADAPT.



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Fred Mallett
frederm@famece.com

A Compilation Recitation

Thanks for noticing! I just got back from *InterWorks '98*, the Interex users group conference for Technical Computing on Hewlett Packard equipment. Many of you came to me in person and asked the question "Should we do more Regular Expression columns?"

The answer from everyone I spoke to was "Yes!"

What a concept, speaking directly to another person. It is always nice to find out that people actually read what you struggle to write. That's different from programming, where people struggle to read what you wrote.

The main series on regexp notation is complete, so this month we'll be talking about another performance issue - compiled expressions.

As mentioned in past columns, the regexp search engine must *compile* an expression before applying it to the search string. Depending on the complexity of the expression, this might be easy or hard (slow or fast). Once the compile (interpretation?) is done, the search is performed, and the compiled expression is discarded (not always true, but good enough for now).

If it takes a while to compile, and you are using the same expression against many strings, it could end up comprising a significant amount of the run time. An example of this is a filter type program, where an expression is often applied against each line in a file.

Most programming languages allow for a method to tell the compiler that an expression will be used many times, and that it will not change between runs of the program. If this is true, the compiled expression will be saved, and thus not have to be re-compiled for each match attempt. Some languages are smarter about this issue than others, and perform the optimization automatically.

A PERL OF A PROGRAM

To prove both of these issues, here are some examples of perl code:

The program **sumnum**:

```
1: #!/usr/local/bin/perl
2: $sum=0;$fp='\d+\.\d+';
3: while (<>){
4:  while (/$fp/g){
5:   $sum+=$&;
6: }}
7: print "Total: $sum";
```

This program looks for every floating point number in a file and adds them up. For the Perl impaired, here is a line by line description.

Line 1 says let Perl run this.

Line 2 initializes the variable **$sum**, used to total up all the numbers. It also sets a variable called **$fp** to contain a regular expression that will match a floating point number. This is not a good version of a regexp for matching all varieties of how numbers might be written, but it works for this optimization demonstration.

Line 3 says go get a line from the file name supplied on the command line, then repeat for all lines in that file. The code **while (<>)** is common in typical filter program in Perl.

Line 4 says to search in the current line of the file for a match for the regexp in the variable **$fp** assigned on line 2. The **g** option at the end of the regexp means to remember where in the string it was found, so that the next match attempt will start after that point in the string. That allows us to use the regexp as the condition of the **while** loop. If there are 3 numbers on a line, this while will loop 3 times, once for each number found, then fail the match, and fall to the outer loop, which gets the next line in the input file.

Line 5 sums up all the numbers found.

Line 7 prints the total of all numbers when all input lines are processed.

To run the program, we need a file with numbers in it. After searching a bit, I ended up writing a file with numbers scattered around, but it was too small to measure. Hmm... I wonder if there are any numbers in a *core* file. I have an application that core dumps at logout. After a quick logout and back in, Presto!, we have a 2,110,252 byte file to play with. It had 4384 lines, and 109 floating point numbers scattered around in it. Finally, a good use for a core file.

Here is the command line used to run the program and the resulting output:

```
$ time sumnum ~/core
Total: 17656.4206
real    0m5.17s
user    0m4.67s
sys     0m0.47s
```

WAIT REDUCTION PROGRAM

I used the time command to get some quick stats on the run of the program. It took 5.17 seconds to run. Hmm... is this good or bad? Lets revise line 4 of the program as follows:

```
4: while (/$fp/go){
```

Note that the only change was to add the o option to tell Perl that the regexp contained in the $fp variable will not change during the run of the program, thus it can be optimized (compiled once). Running the program again, results in the following output:

```
Total: 17656.4206
real    0m3.40s
user    0m2.91s
sys     0m0.47s
```

We have realized a 35 percent reduction in elapsed run time. This is significant! Note that in actuality, the programs were run several times each to be sure that the times were representative of average run time.

This proved the benefit of compiling a regexp, even on simpler expressions. In fact, even literal expressions can gain from optimization, since it is the time taken to recompile the expression that we are saving, not the time taken to perform the search.

To prove this, I changed the program to count how many times the string *good* appeared in the core file.

Line 2 is now: $fp='good' and line 5 is $goods++;. Line 7 prints the variable $goods which now counts how *good* the core file is. As expected, there is no such thing as a *good* core file, so *good* was never found.

The program took 5.04 seconds to run. If we put the o option back on the regexp search (/$fp/go), we now take only 2.2 seconds to determine this is not a *good* core file.

Python, Perl and JavaScript all support this type of compile optimization. As I expected, (since it does everything) Perl performs it automatically where it can.

If line 4 of the original program were written:

```
4: while(/\d+\.\d+/g){
```

Perl would have automatically saved the expression after compile, since it was literally typed in. It is only when an expression uses a variable of some type that the Perl compiler can not be sure if the expression will change between accesses, thus it must recompile for each use.

The lesson here is that whenever you assign a regexp, or part of it, to a variable, and that variable won't change, use the o option. Conversely, if the variable will change, do not use it, as Perl won't recognize changes in the expression.

OPTIMIZED READERS

Let's do some of our own optimization of regexps. If any of you have some expressions you find very useful, please email them to me. Include what you use them for, and in which language. There will be a column in the future dedicated to submitted examples. They can be for use in any program, and for any task you think others might also be performing.

If enough of you want to hear it, we can go into a couple of columns on Perl specific regexp capabilities. For example, negative-assertion-lookaheads. Gosh, just typing that gives me goose bumps.

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Ryan Maley
ryan@maley.org

Picture Windows 98

Windows 98 will be the last release of Windows as we know it. Microsoft announced that the

next release of Windows will be some version of NT. In the meantime, Win 98 is a significant upgrade, but it's not the same leap forward as from Windows 3.1 to Windows 95.

Believing that people want their computer interfaces to be like the Web, Microsoft has changed parts of the desktop to look and act like a browser. The Control Panel has a toolbar with **back** and **forward** buttons and acts as a browser interface with frames. The left frame has familiar icons like **Add/Remove Programs**. The right contains a short description of the Control Panel and has links to Microsoft's support and Windows Update sites with drivers and patches. Selecting any of these links opens an Internet Explorer 4.0 browser window connected to the remote Web site.

HEY BUS DRIVER

Win 98 contains built-in drivers for the Universal Serial Bus (USB), Digital Versatile Disk (DVD), infrared wireless devices and high performance Accelerated Graphics Port (AGP) video cards. While DVD hasn't gained wide acceptance and USB peripherals are hard to find, expect this to change now that Win 98 is on the streets.

One feature which will help PC owners immediately is FAT32. This new file system breaks the current 2 GB limit for disk partitions and features smaller clusters for more efficient formatting. Under the old FAT system, drives larger than 1024 MB were automatically formatted with 32 KB clusters. With FAT32, 32 KB clusters aren't used until a drive is larger than 32 GB. A typical drive somewhere under 8 GB will be formatted with 4 KB clusters under FAT32, resulting in significant space savings.

WSH-FUL SCRIPTING

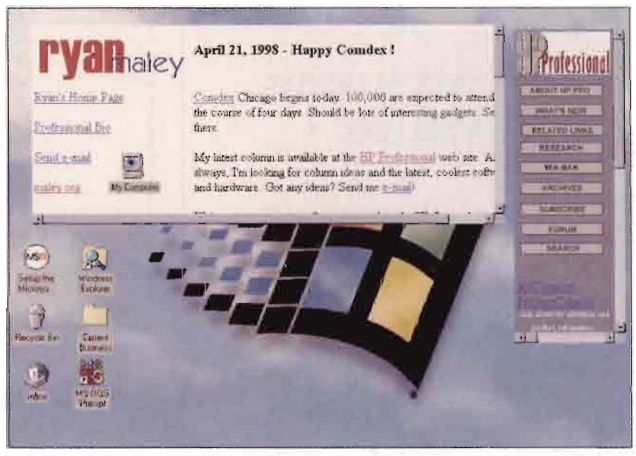
Win 98 also features the new Windows Scripting Host (WSH). WSH supports Visual Basic Script and JavaScript programs. The host is designed to be extensible and supports other script languages. It allows scripts to be executed from either the command line or from Windows.

The Win 98 Emergency Boot Disk now features CD-ROM drivers. The boot disk features IDE, Adaptec SCSI and Bus Logic SCSI drivers. It keeps the programs you might want to use compressed on the diskette so that when you boot, pick the correct CD RPM driver and a RAM disk is created and various Win 98 programs like FORMAT are placed there.

There are more features than we can discuss here. Backup now supports SCSI tape devices and network shares. Dr. Watson reports more information on software faults. The System Information Utility collects data about your configuration, useful for troubleshooting, and a tune up wizard allows system maintenance functions like defragmentation to be scheduled.

Installation went smoothly until the hardware detection phase, which took twice as long as expected on a Pentium 200 with 64MB of RAM. This is a brute force operation with lots of tries at discovering all the hardware. With a lot of desktops to upgrade, you should investigate the scripted installation. ◆

Ryan Maley is a Microsoft Certified Systems Engineer and the information systems manager for a Midwestern manufacturing company.



With Active Desktop, you can place functional, hyperlinked Web pages on the background to provide seamless integration. Pages are placed in separate windows independent of one another. All desktop icons can be moved to the taskbar or put in a floating toolbar to free up screen space.

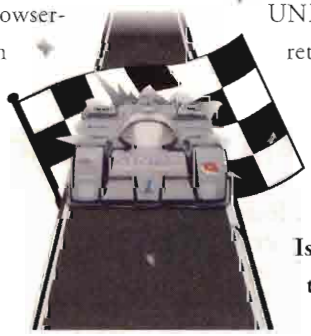
Running Into Potholes...

On Your Road to NT and UNIX Connectivity?

Running into trouble trying to integrate your UNIX and Windows NT network? TotalNET Advanced Server (TAS) software will smooth the rough road ahead.

TAS enables UNIX computers to become NT file, print and application servers. Setting up and using TAS is quick and easy, thanks to intuitive, browser-based installation and graphical configuration wizards. No additional software is necessary on the NT workstation!

NT File/Print/Application Services: NT users access files and printers residing on UNIX servers using normal NT functions. TAS also enables NT users to access NT applications stored on a UNIX server.



Common File System: Data and applications are stored in a central TAS-based server where NT and UNIX users can easily access the same data.

Transparent to the NT Desktop: The TAS server is seen by NT users as a PC server, so users do not need to know UNIX to access resources on that server. No retraining is involved.

Scalability: TAS provides file/print/application services to thousands of NT and PC workstations.

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WINNER BEST

PC LABS ANALYST'S CHOICE TAS 5.0 June 2, 1997

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➤Contact Client/Server Technology, Inc., Atlanta, GA at (800) 773-9574.

J. River's New Development Kit For ICE.TCP Pro

J. River is introducing an Application Programming Interface for ICE.TCP Pro that can help developers extend the life of legacy UNIX applications. ICE.TCP Pro includes a terminal emulator implemented as an embeddable ActiveX control. This allows developers to customize and control terminal emulation within a telnet-enabled application.

The control can be used with ActiveX-enabled development tools like Visual Basic, Visual C++, Delphi or Borland's C++ Builder to extend a terminal-based application. After creating a container application and embedding the ICE.TCP Pro terminal emulation control, the UNIX application can be run or queried remotely. It is available for $495.

➤Contact J. River, Inc., Minneapolis, MN at (612) 677-8248.

ZEUS - Lightning Strikes The Programming World

Albert's Ambry has brought to the Internet ZEUS - a text editor/IDE (Integrated Development Environment) designed specifically for programmers. ZEUS is designed with the professional software developer in mind, offering features which make programming easier and more productive. ZEUS is customizable and language-neutral, working with all third-party development tools and compilers. It is available in 16-bit and 32-bit versions. Both versions support background compiling and build task runs.

ZEUS supports keyboard mapping for Brief, WordStar, Epsilon and Emacs. It also has a built-in macro scripting language, color syntax highlighting and fully customizable (smart code) completion. ZEUS costs $95 for a single-user license with multiple licenses discounts available.

➤Contact Albert's Ambry, Bala Cynwyd, PA at (800) 996-2252.

DATA WAREHOUSING

Prism Releases New Executive Suite

Prism Solutions, Inc.'s Executive Suite new data warehousing software product introduces server-side Java technology to the data warehousing market, as part of its new architecture.

The Executive Suite includes: Prism Warehouse Executive, a development environment that allows users to acquire, transform and integrate data for warehousing databases; Prism Warehouse Directory, a meta data directory that exploits Web technology; and Prism Quality, a data quality solution that allows users to audit, manage and improve the quality of information across the enterprise.

Prism's Executive Suite will be generally available in the summer of 1998. License fees start at $95,000 for the base configuration that includes Prism Warehouse Executive and Prism Warehouse Directory.

➤Contact Prism Solutions, Inc. San Francisco, CA at (800) 995-2928.

DISASTER RECOVERY AND SECURITY

Internet Dynamics Releases of Conclave v1.5

Conclave(TM) v. 1.5 is designed to provide customers with a solution that is easy to install and deploy and that can grow incrementally with a company's expanding network and unique security needs. It adds expanded remote access options, support for third-party certificates, exportable 128-bit encryption, and installation and setup redesigned to allow staged deployment of security capabilities to Conclave v. 1.0.

Conclave 1.5 includes universal remote access options, installation by degree where Companies can install security features in stages, trusted CA support and exportable 128-bit Encryption. The end-user price for a 25-user, single-site license is $2,495.

➤Contact Internet Dynamics, Inc., Westlake Village, CA at (630) 395-1061.

ScanMail For OpenMail

ScanMail for OpenMail is billed as the first-ever anti-virus software for the Hewlett-Packard's messaging platform. Companies that use OpenMail can detect and block out viruses attached to e-mail messages. ScanMail for OpenMail provides server-centric virus protection that stops viruses at the point where they enter a company's network-long before they reach individual desktops and pose a real threat to data integrity. This focus on central control-managing virus protection from a single point-significantly lowers the cost of virus protection and minimizes productivity loss due to desktop computer "down time." ScanMail runs with OpenMail versions 5 and 5.10 and starts at $16,500 for up to 1000 users.

➤Contact Trend Micro, Inc., Cupertino CA at (800) 228-5651.

Digital Equipment Announces NetWorker 5.1

NetWorker for Windows NT, version 5.1, for Digital's Alpha and Intel platforms, allows customers to back up distributed storage from a storage node. A storage node, a client with storage devices attached, off-loads the main server during large transfers of data to secondary storage used for backup, and eliminates network bottlenecks.

On an AlphaServer system, the software can back up more than 550 gigabytes per hour. Database modules include Microsoft Exchange Server and SQL Server, Informix, Oracle, and SAP R/3 for Oracle for Windows NT-based Intel platforms; and Informix running on Digital UNIX platforms.

Digital NetWorker for Windows NT, v5.1 starts at $1,000, NetWorker for Digital UNIX, Version 4.4 starts at $2,500, NetWorker OpenVMS Client software starts at $1,000. The database modules start at $995.

➤Contact Digital Equipment, Corp., Maynard, MA at (800) 344-4825.

SAM Request Manager From Schumann Security Software

SAM Request Manager (SAM/RM) is a new information security workflow system. By automating the end user view to security SAM/RM replaces the traditional paper-based system of IT security requests, increases IT staff production, reduces security access errors, decreases costs and raises the overall level of security.

SAM/RM works by providing users a simple, windows-based graphical user interface (GUI). This GUI allows employees to initiate requests that are automatically sent for approval. This faster flow of information reduces the authorization process from days or weeks to only a few hours, providing relief to administrators overwhelmed by authorization requests and allowing them to concentrate on more critical tasks.

➤Contact Schumann Security Software, Inc., Laurel, MD at (301) 483-8807.

MESSAGING AND E-MAIL

Tally Systems MailCheck 4.0

MailCheck 4.0 enhances service level management by including features that centralize network e-mail management and gather critical data for ensuring maintenance of service during times of vulnerability, such as during migration from one e-mail system to another.

Status and statistics are published in HTML and supports open messaging systems like Netscape Messaging Server and Windows messaging Subsystem. User names and passwords establish secure policies for monitoring and rights can be granted to specific monitoring functions. Native SMTP/POP3 option allows users the use of TCP/IP to communicate directly with Internet mail servers.

➤Contact Tally Systems Corp., Hanover, NH at (603) 643-1300.

I/G OpenWare Releases Direct-TO-1 4.0

In addition to helping Novell GroupWise users to migrate to Microsoft Exchange, Direct-TO-1 now allows users to migrate from GroupWise and Exchange to Lotus Notes and automatically converts all e-mail addresses, folders, attachments and message flags to Lotus Notes format.

Users can choose documents they want to migrate to Notes and complete the

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migration when most convenient for them. Because addresses and key message attributes like importance indicators and confidentiality flags are retained users can immediately access migrated information in Notes. The software is Year 2000 compliant now. Pricing is based on volume purchased and starts between $35 to $46 per user.

➤Contact I/G OpenWare, West Chester, PA at (610) 241-6000.

SLmail 3.0 From Seattle Lab

SLmail version 3.0, recently released by Seattle Lab, is built on Microsoft's Component Object Model (COM). It is the first email server that can be programmed by the user.

Through open APIs, SLmail 3.0 allows system administrators to take command of incoming mail to build interfaces to proprietary email systems, pagers, or universal messaging systems. Seattle Lab ships the source code for the filters, for easy modification by the user, and documents how users can write original filters. SLmail 3.0's content filters allow complete control of incoming email - for example, special notification and handling on incoming mail containing any words specified. Templates and sample source code are included with the program. SLmail supports unlimited users for $425.

➤Contact Seattle Lab, Bothell, WA at (425) 402-6003.

MULTIMEDIA

Jetsoft Ships Art-Scan 4.0/PC For Win 98

Art-Scan 4.0 for PC allows scanner users to improve the color quality of their scanner from their existing twain driver. Art-Scan has added an automatic color correction tool, which allows the novice user the ability to scan and produce beautiful color. Art-Scan automatically crops, balances and corrects the color to produce pleasing results every time. Art-Scan has also added a Spring Zooming Preview that allows use of a larger portion of your monitor. After a preview is done, Art-Scan will crop the image, resize the Art-Scan window and zoom the picture to full size so you can see every detail. Jetsoft made sure to keep Art-Scan's popular features such as the ability to scan directly to an Adobe Illustrator file; unlimited interpolated resolution; batch, multi page, & auto scanning modes; and auto rotation. Art-Scan 4.0 /Mac and PC is now shipping for $79.95.

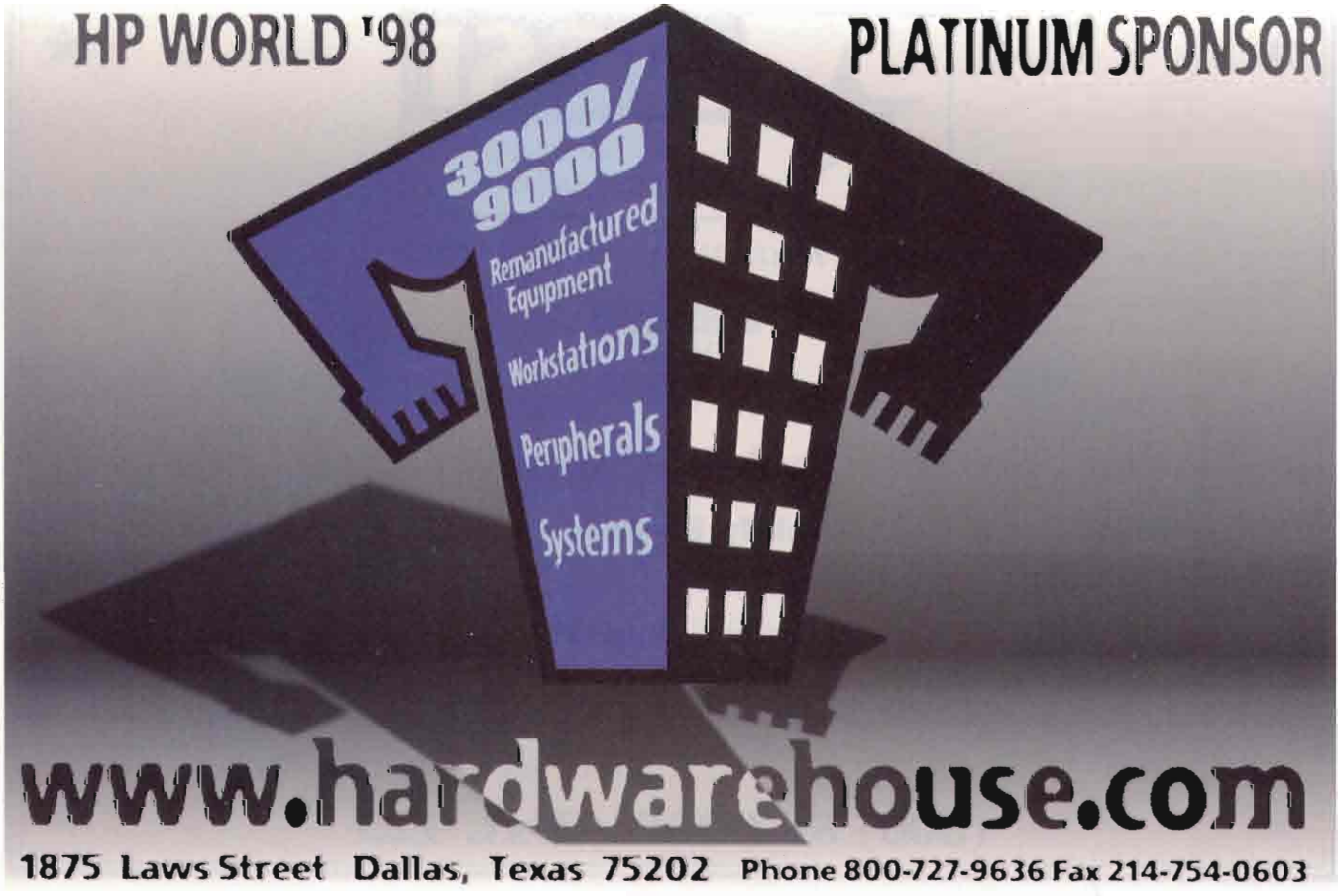
➤Contact Jetsoft Development Company, Cincinnati, OH at (800) 782-5974.

Hansol Multitech Introduces 19-Inch Monitor

Hansol Multitech announced a new 19-inch full featured professional desktop display, the model 900P, which is built for Fortune 1000 users, software developers and graphic designers.

The 900P monitor features a control on the lower front bezel which is rotated by the user to execute eleven different preference settings for on-screen adjustments. It is both PC and Mac compatible and features a black matrix CRT with INVAR shadow masking to enhance brightness and contrast and covers resolutions up to 1,600 x 1,200 with refresh rates up to 120Hz and dot pitch of 0.26. Estimated street price of the unit is $699.

➤Contact Hansol Multitech, Inc., La Palma, CA at (888) 426-7651.



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NETWORK INTEGRATION

New PCI Bus 5250 Plug And Play Adapter

Affinity Systems' new PCI Bus 5250 Plug and Play adapter, compatible with any PC with a 33-MHz PCI Specification 2.0 or higher is based on Affinity's 100% IBM register-level compatible 5250 adapters. This ensures compatibility with current and future versions of 5250 emulation software including IBM 5250, Client Access, PC Support, Netsoft and Rumba.

It does not have any switches or jumpers and automatically configures itself in a Plug and Play compliant PC and adjusts itself as new adapters are added or deleted to the PC. The PCI Bus Adapter is available now at a price of $249.

➤Contact Affinity Systems, Lansdale, PA at (800) 432-1774.

Frontier Technologies SuperTCP Suite 6.0

SuperTCP 6.0 gives access to business critical information on local mainframes, remote hosts, or resources on the Internet for users of Microsoft Windows 3.x, Windows 95, and Windows NT. The Remote administration feature enables system administrators to remotely configure, update, and modify SuperTCP connectivity applications on users' desktops. SuperX Server provides users with the ability to utilize X clients from within a Web browser so that they can connect to UNIX applications via an HTML web page. The SuperNFS module of SuperTCP Suite provides full NFS V3 support and an NFS client optimizer. SuperTCP Suite 6.0 is priced at $395. SuperX and SuperNFS modules are available separately.

➤Contact Frontier Technology Corporation, Mequon, WI at (800) 929-3054.

PRINTERS

DCI Laser Card 5250-MIO

Connect HP LaserJet IIISi, IV and V printers directly to a IBM AS/400 or System/3X host with DCI's Laser Card 5250-MIO. Because it fits directly into the printer's MIO slot and fully integrates with the printer, documents and forms are printed at exceptional speed. Set up and configuration are performed through the printer's front panel.

The printer can also connect to a LAN, PC or ASCII host using a built-in parallel port. Automatic switching between the Twinax and parallel ports enables print jobs to be initiated from both. All IBM midranges are supported, as is IBM' complete line of remote twinax controllers. Laser Card 5250-MIO sells for $499.

➤Contact Affinity Systems, Lansdale, PA at (800) 432-1774.

SERVICES AND SUPPORT

Rockford Industries, Inc. Signs Financing Agreement With World Access, Inc.

Rockford Industries has signed a two-year agreement with World Access, Inc. whereby Rockford will offer comprehensive leasing and financing programs to World Access customers for the complete line of World Access telecommunications products. World Access, based in Atlanta, GA, is a leading, diversified supplier of a wide array of telecommunications network products and services. The agreement targets $40 million of domestic contract originations during the initial two-year period. During the agreement period, Rockford will also be developing financing and leasing alternatives for World Access, Inc.'s international customers.

➤Contact Rockford Industries, Inc., Santa Ana, CA at (714) 547-7166.

STORAGE

ATL Products' New PowerStor L500 Series

The PowerStor L500 DLT Library is for small to mid-sized UNIX and NT LANs. The PowerStor L500 supports up to 3 DLT drives in a single 7" high rackmount, or 7" wide deskside enclosure. With support for up to 3 DLT drives and 14 DLT cartridges, it delivers 54 gigabytes per hour back-up performance and 490 gigabytes of storage capacity.

Optionally available is WebAdmin software that allows remote library administration using a Java-enabled browser. PowerStor L500 drives can be migrated to other higher performing, larger capacity ATL libraries.

➤Contact ATL Products, Inc., Irvine, CA at (714) 774-6900.

Todd Introduces The TITAN Line Of High Performance Products

Todd Enterprises has introduced the Titan 200 Networking & Management System for high speed access to CD-ROM data. The Titan 200 is a complete CD/DVD-ROM networking & management system, featuring a rackmountable 200-disc jukebox, a fully configured RAID array with redundant power supply, a high-speed Pentium processor, Windows NT, 64MB RAM, 10/100 Network Interface, and CD-ROM networking software.

The Titan 200 provides highest-speed access (120X!) to data by moving the files to a RAID array, multi-protocol support, scalability and LAN/WAN connectivity.

➤Contact Todd Enterprises, Inc., Plainview, NY at (800) 445-8633.

SYSTEM AND NETWORK MANAGEMENT

Fastlane Software Systems Announces Xni V2.1

Xni 2.1 provides network analysis, security and accounting package on the HP-UX platform. It is a software solution that monitors every conversation between hosts in real time, producing a graphical view of network usage and traffic flow without the resource drain or dedicated hardware.

Xni installs on any client workstation and requires no special configuration or user training. Unlike SNMP-based tools that lack real-time capabilities or sniffers that monitor network traffic intermittently, Xni records information continuously and creates a picture of what network resources are being used and how. Through a web-based interface, users can remotely monitor networks and wide area links from anywhere from any platform.

➤Contact Fastlane Software Systems, Sunnyvale, CA at (408) 733-1483.

The Enterprise Edition And V2.0 Of The Internet Watchdog

This program is now available in a network version enabling employers to monitor and record all computer activity - including the Internet. By taking random screen captures, logging every computer application, and recording downloaded graphics, Watchdog monitors the activity on the computer and prints reports detailing the information. The program can view multiple clients from one machine.

Internet Watchdog doesn't require updating and provides employers with a complete printed record of the computer user's activities. It Runs on Windows 95 and Windows NT (Including WIN 98). $499.95 U.S. $699.95 CAN: SINGLE PC $39.95 US $55.95 CAN

➤Contact Charles River Media, Inc., Rockland, MA at (800) 382-8505.

NetOps Announces Web-Based Network Fault Prediction Product

NetOps Corporation announced Do-It-Yourself (DIY) analysis, a network fault prediction analysis product available for

access via the Internet. It allows network engineers the ability to identify, isolate and fix problems within the network infrastructure before the user organization is affected.

DIY is entirely Internet-based: after filling out a standard online registration form, the user is able to download NetOps' Distributed Status Monitors (DSM). End-users pay a flat fee of $500 per upload of data, plus an additional $10 for a week's worth of data per SNMP device.

➤Contact NetOps Corporation, Pleasantville, NY at (914) 747-7600.

WORKFLOW AND DOCUMENT MANAGEMENT

Electronic Forms Software For UNIX

Synergetic Data Systems, Inc. (SDSI) announced UnForm Page Enhancer, a tool that allows UNIX developers and user to enhance forms and reports without application modification or coding expertise.

According to SDSI, UnForm eliminates the need for preprinted forms, saving UNIX sites the cost of printing and storing tons of paper forms annually. Developers can enhance existing documents with images, logos and other graphical elements all without modifying the existing code. Users cal also design their own forms with the graphics and fonts of their choice. It is priced at $605 per license.

➤Contact SDSI, El Dorado Hills, CA at (916) 933-0120.

YEAR 2000

MB Solutions, Inc. Announces JCL/Analyzer

JCL/Analyzer provides reports that give your team information to effectively manage your Year-2000 conversion efforts. JCL/Analyzer makes certain that every file affected by a record layout change has been updated by identifying the actual filenames referenced by every Program/DDname combination.

It confirms that all usages of a "Changed" record layout are in sync by finding every Job Step or Program, including Sorts and IDCAMS, that uses any selected file. JCL/Analyzer prevents file truncations and "Wrong LRECL" errors at run time by pinpointing every instance where LRECL or BLKSIZE is coded in your JCL and IDCAMS statements. Usage-based, site license prices start at $6,800 for MVS systems.

➤Contact MB Solutions, Inc., Denver, Colo. at (800) 779-1740.

EAC Announces Platinum Care Program

EAC Network Integrators will design, implement and manage year 2000 compliant information environments. The Platinum Care Program is a framework of resources supporting solutions and services which address 2000 compliance issues, 24 hour systems and network support, and the planning/design assistance of comprehensive Open Systems networks.

EAC's PCP is a logical framework and set of methodologies delivering the IT industry's best practices and products. With proven methodologies, senior EAC consultants will help companies improve their information flow and use their business processes & knowledge for the greatest possible impact. Each practice is supported with a five-phase approach of assessment, planning, design, implementation and management.

➤Contact EAC Network Integrators, Trumbull, CT at (203) 371-2442.

Announcing Alternative HP Maintenance Programs

C.S.U. Industries, one of the world's largest HP dealers announces a maintenance program designed specifically for the HP 9000 user!

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SystemLink Offers Free Year 2000 Compliance Software

SystemLink is providing free of charge a program that will test your computer for Year 2000 Compliance. Also available for free is their report "Issues and Solutions for Year 2000 Compliance" which steps companies through the process of verifying Year 2000 Compliance.

Their Year 2000 report steps companies through the three main stages of compliance: discovery, prioritization, and control. SystemLink also provides tools to help automate the verification of Year 2000 Compliance.

➤Contact SystemLink, Baltimore, MD, at (888) 344-7770.

DESKTOPS AND SERVERS

New ProLiant 3000

Compaq has announced a new ProLiant 3000 server which features up to two 333 MHz Intel Pentium II processors capable of supporting up to 3GB of system memory and up to 109.2GB of internal hot-swappable storage.

Compaq also included enhancements to Insight Manager 4.0 with Web-enabled clients for NT 3.51 and 4.0 and Netware 4.x for configuration and fault and remote management of Compaq desktops, servers and workstations. SmartStart 4.0 now delivers off-the-shelf integration support for packaged versions of many operating systems including NT Server 4.0, IntraNetWare and SCO UnixWare 7. The ProLiant 3000 starts at $4,499.

➤Contact Compaq Computer Corp, Houston, TX at (800) OK-COMPAQ.

NETWORK AND SYSTEM MANAGEMENT

SharpeWare's Space Watch v3

SharpeWare has released Space Watch v3, a program that lets PC and network users search and analyze disk space; pinpointing unexpected and unwanted files and directories as well as important changes over time. Space Watch v3 analyzes both Netware and NT systems.

It uses a graphical presentation of space use, linked by single click `drill down', finds and acts on - the information you want becomes quick and easy. Space Watch v3 collects a profile of the chosen PC, server or servers in a database for off-line analysis. Space Watch is $44 (standard) or $154 (network edition).

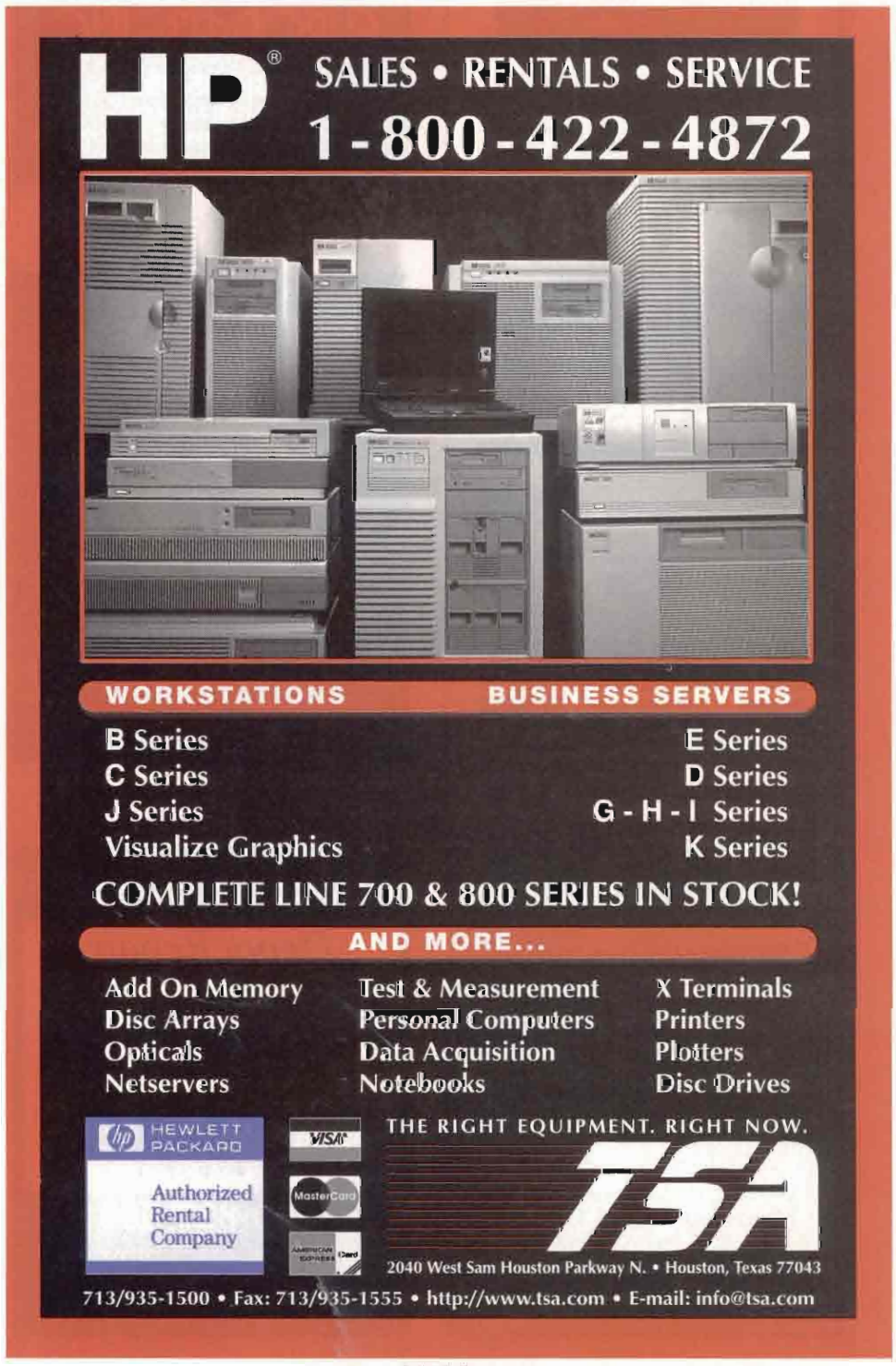
➤Contact SharpeWare, Peebles, Scotland at (800) 242-4775 x14376.

Apcon, Inc.'s New PowerSwitch/NT

PowerSwitch/NT is a high availability product that falls into a unique NT fail-over technology by switching applications and data, stored on external RAID's, to secondary servers. It fully supports N+1 server configurations and provides cascading fail-over versatility.

It allows up to 16 servers and automatically moves services, applications and peripherals to secondary servers without degrading system performance and with no user intervention. A GUI structure supports remote installation, administration and a way to view status of all servers, peripherals and resources in the configuration. Pricing ranges from $3,388 to $5,620 for rackmounted models. Desktop models start at $2,400.

➤Contact Apcon, Inc., Portland, OR at (503) 639-6700. ◆



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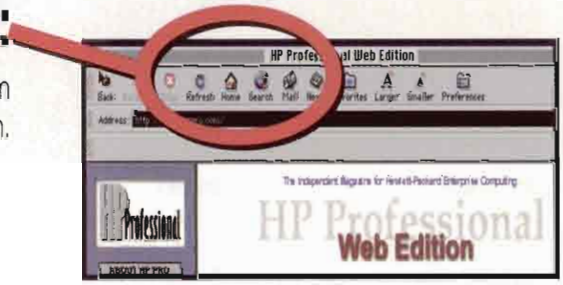

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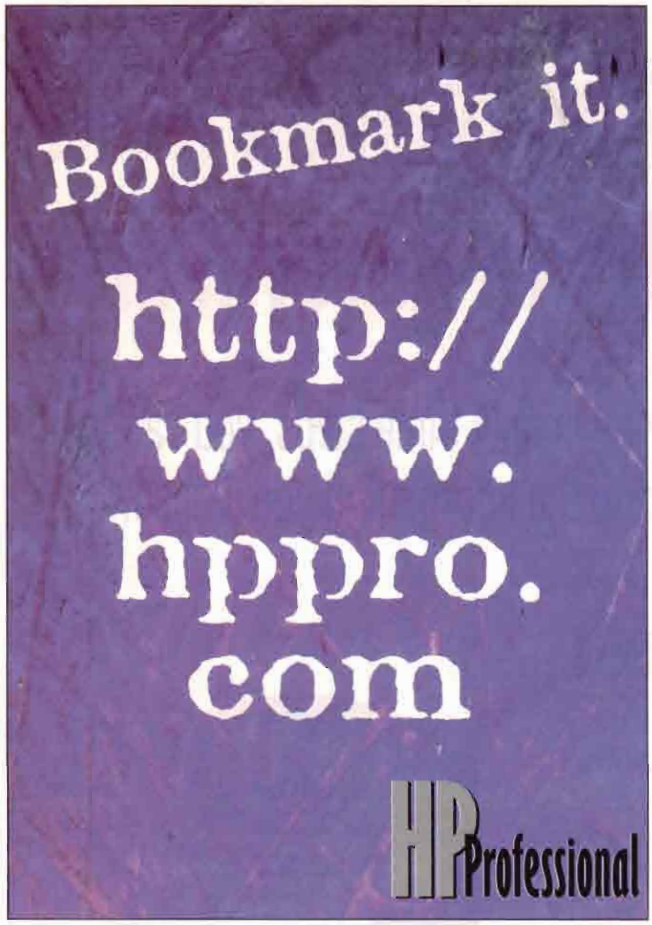

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Expand Your Virtual Horizons

Soccer Scores On The Web!

Soccer is the world's most popular sport. Hundreds of millions of fans from all over the world will watch on TV or attend at least some of this year's WorldCup 98 games being played right now in stadiums all over France.

Regular readers know that HP, EDS, Sybase and France Telecom make up the team of hi-tech superstars that won the competition to build the event's technical infrastructure.

This month's Internet tour(nament) takes a look at some of their WorldCup-related Web sites.

If you know the difference between a Queen's Park Ranger and Sheffield Wednesday, you are a true soccer (football) fan and might want to start with www.fifa.com, the home of the Federation Internationale de Football Association.

Get to these sites through www.hppro.com.

Everything you want to know about the tournament is on the official home page of WorldCup '98. From free screen saver downloads to a complete bracket breakdown to press kits to the official souvenir store to a reminder of how many tickets still remain, if it's WorldCup related, this is where you'll find it.

THE OFFICIAL HOME OF THE TOURNAMENT WWW.FRANCE98.COM.

HP has their own site that not only offers a behind-the-scenes look at their participation in the event, it also has games, trivia contests and The Stadium of Dreams which "lets you explore a virtual demonstration of what the World Cup really means to its participants."

HP CHRONICLES THEIR PARTICIPATION AND HAS A LITTLE FUN IN THEIR CENTRE CIRCLE AT WWW.HP.COM/WORLDCUP98.

No trip to the WorldCup, even a virtual one, is complete without souvenirs. That's where EDS can help with their online store. Developed in conjunction with HP and Sybase, it offers everything from house and leisure items, collectibles, junior apparel to a listing of the day's sale items offered at 20 percent off. If you don't feel like browsing, there's a search engine for your convenience.

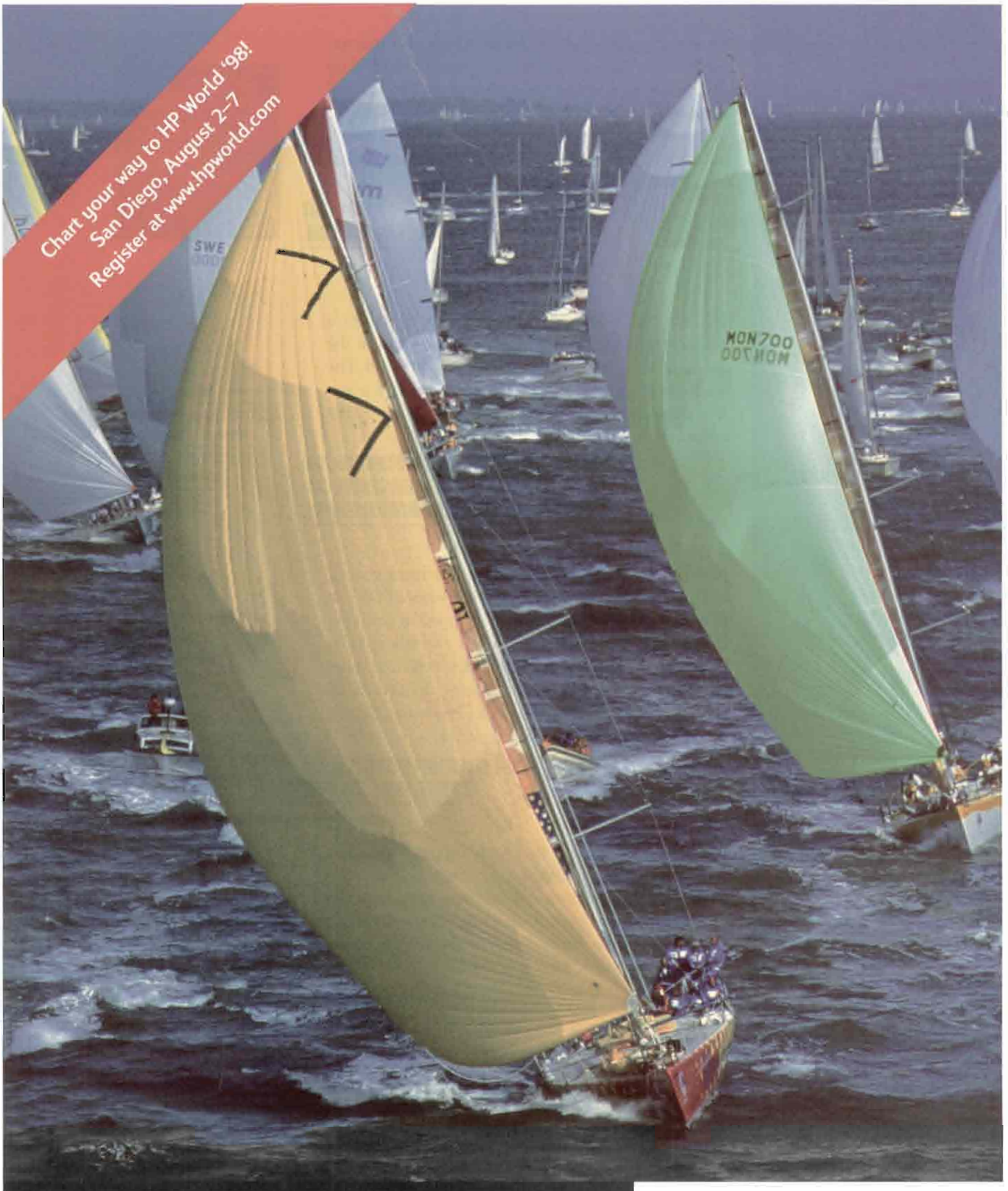
ATTENTION BLUE LIGHT SHOPPERS! BUY IT ALL AT STORE.FRANCE98.COM.

If you're as interested in a technological overview (complete with descriptions of the business problems to be solved, summary and descriptions of the Sybase products used and whitepapers detailing the process case study) as you are in the sport, don't miss Sybase's entry.

IF TECHNOLOGY'S MORE YOUR GAME, GO TO WWW.SYBASE.COM/WORLDCUP.

Le dernier mais ne pas les moins. Or, last but not least, for a completely French perspective on building and maintaining the network and selling the games, try the home site of French Telecom. No fair cheating and going to the North American English site. Maybe you'd better look for a downloadable French/English dictionary first.

FOR A REAL FRENCH TWIST ON THE GAMES, TRY THE FRENCH VERSION OF FRANCE TELECOM AT WWW.FRANCETELECOM.FR.



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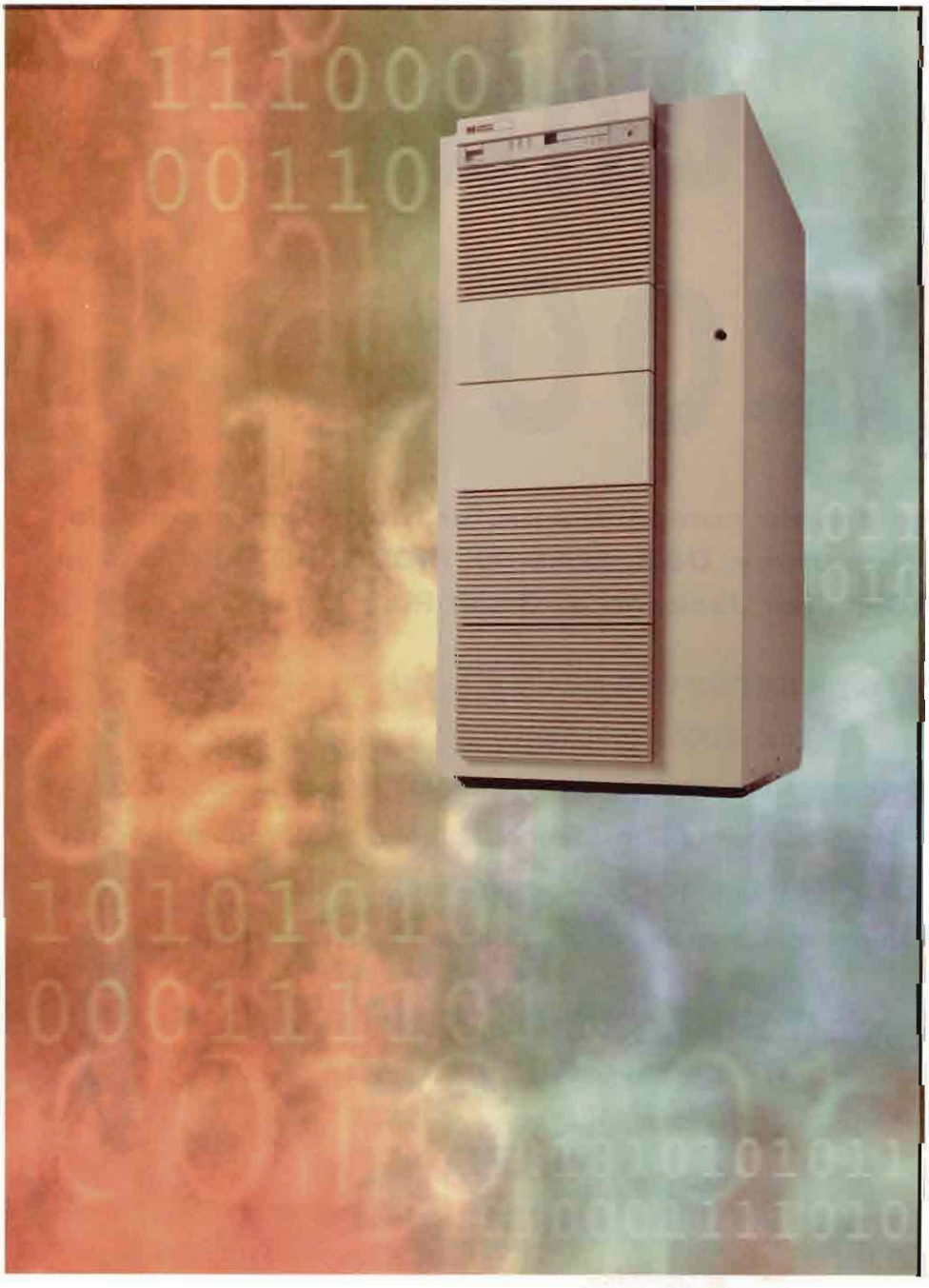

Spalding Sports HP 3000 Successes

Spalding Sports runs their $1 billion sporting-goods firm on three HP 3000s. Always team players, they don't mind inserting UNIX and Windows NT into their lineup when appropriate.

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Hicomp America's Hiback TX S-44

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SWIMMING ALONG

EVERY NEW TECHNOLOGY, new product and new idea from upper management can add another stress line to the collective IT support manager's forehead. Just ask the attendees at a recent meeting of the Northeast Central HP Regional Users Group (NECRUG). One member, after an edict from his management team, has to dump an IBM 3090. He is now tagged with the job of converting a customer database application from MVS to run on an HP 3000.

NOT SO DUCKY

The HP 3000 marketplace, these days, seems like an upside-down duck — the feet are kicking like mad, stirring up the air around them while the duck just moves along at a steady pace. Ok, the metaphor falls apart because the duck (unlike the HP 3000) will eventually drown; but you get the picture. The borders for the picture presented at the NECRUG meeting were drawn around MPE/iX *and UNIX and Windows NT* interoperability. The primary attendees were HP 3000 die-hards who, for one reason or another, were being thrown into an ocean where they would have to learn to swim in what is for them — uncharted waters.

When one presenter asked if anyone knew anything about Windows Internet Name Service (WINS) or Domain Naming Service (DNS) technology, only two of the 18 attendees raised their hands. One impression of the group, is that in the world of Microsoft interoperability, they are getting kicked by the duck. For insight into an MPE/iX-loyal multi-national firm that plunged into the UNIX and NT interoperability waters feet-first, swim over to our story about Spalding Sports on page S-46.

NEW FEATHERS

Once the conversation turned to what's new for the HP 3000, the mood became downright giddy. First, a local consultant gave a slide presentation on Samba/iX. A freeware product ported from UNIX that allows for file and print sharing from a Windows 95/NT PC, it will be bundled and supported under MPE/iX 6.0.

Next came an HP CSY R&D representative, Alvina Nishimoto, in from Denver to whet the attendee's appetites. She started by announcing that the HP 3000 is having its best year in terms of revenue in the last five years. She described British Air's new reservation system and the U.S. Mint, which scrapped a UNIX-based catalog order system that could only handle 3,000 orders per day in favor of a Smith-Gardner & Associates MPE/iX solution that easily integrated the 30,000 daily orders the Mint required.

She enlightened the group on inroads that HP is making into Microsoft, educating the Remondians on the finer points of high-availability. "They still think just re-booting the box is acceptable," she said to knowing nods and smiles. Added one interested listener, "Just make your [HP] NT server like the 3000, and I'll be very happy."

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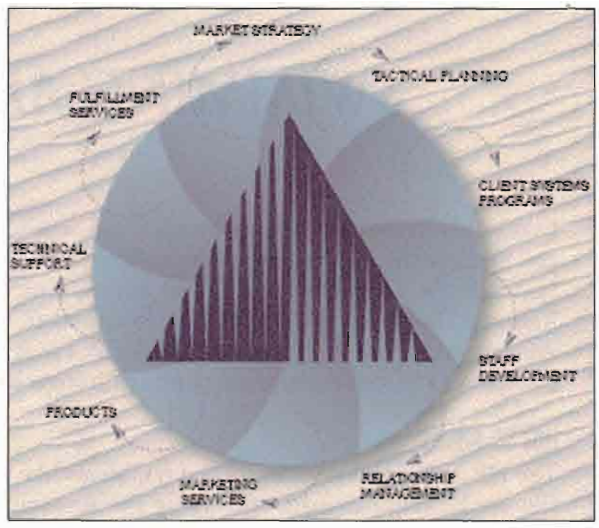
DISTRIBUTOR DEDICATED TO HP 3000

CLIENT SYSTEM LLC, a Denver Colo.-based distributor of HP 3000 solutions, has announced that they are focusing their entire hardware business operation on the HP 3000 series of midrange servers.

The decision, fueled by what they believe are new opportunities in the market for transaction-based applications, prompted the firm to realign their operation with HP to best address target markets like mail order, healthcare, airlines, manufacturing and credit unions.

"Increased demand for the HP 3000 has created the need for a dedicated supply-chain partner that focuses solely on these customers and solutions," says Pat Maley, Client Systems' president and CEO. "With our two-tiered approach to...specialized services, [we] will provide services and support to resellers and manufacturers."

The decision spawned Client Systems' MarketBuilder program, designed to assist their resellers in expanding the market for HP 3000's. The program includes implementation of solutions-based market strategy and planning, rapid response configuration and quotation support, full system testing and integration and exclusive demand-creation marketing services.

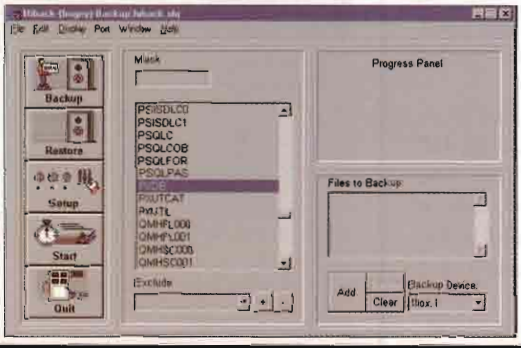


Their MarketBuilder program helps resellers expand HP 3000 markets.

Client Systems serves authorized HP resellers in the U.S. and Canada. They are also an Oracle Value Added Distributor and WRQ master distributor. For more information, call (303) 337-7300 or go to www.clientsys.com.

Product Briefs

Pushing Enterprise Back Ups



HIBACK TX

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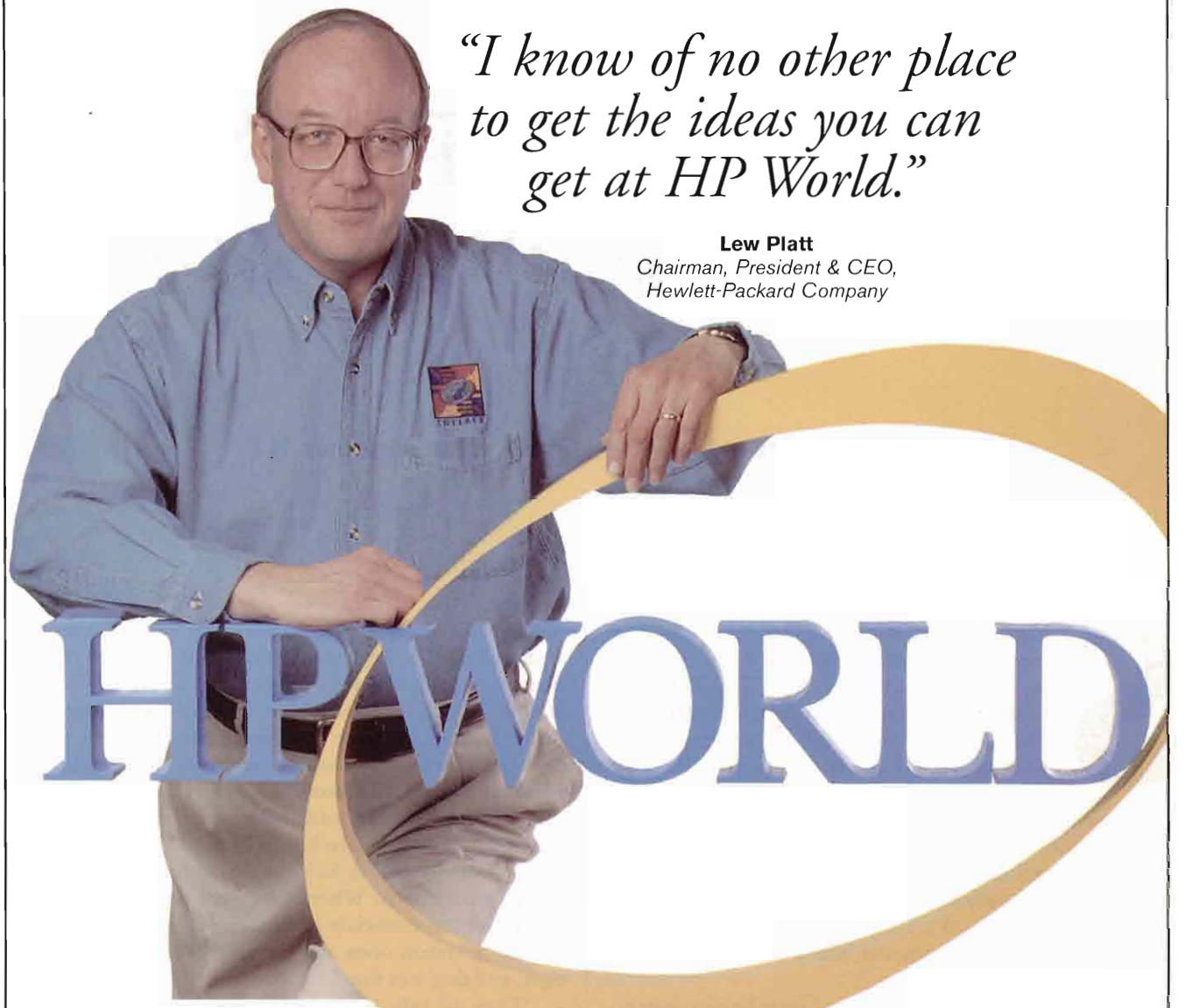
Hicomp Storage Technology (Spring, Texas) has released Hiback TX, the MPE/iX component for an enterprise backup solution. Like most UNIX, Windows NT and Novell machines, any MPE/iX system can now act as both client and server for performing backups.

The UNIX version of Hiback was ported to MPE/iX through the POSIX interface. This allowed the MPE version to gain several features like GUI, Hibars and library support and parallel and multiplexed modes. Hiback TX has also integrated HP's TurboStore API calls which provide online backup capability and independence from future operating and file system changes.

Hiback clients perform their own backup, compress and encrypt the data stream then push it to the server. The Hiback server can also take its own backups, and, if necessary, compress and encrypt them before writing the backups to an attached device.

The server can also accept a data stream from a client and write it to the specified attached device without having to decrypt or decompress the data, minimizing CPU utilization on the server. All Hiback nodes, either client or server, are able to restore from an attached tape drive.

Hiback TX uses the same Windows and Motif GUI currently used on Hiback for UNIX and NT, which allows one PC to access all Hiback platforms. It starts at $1,500.



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Spalding Sports HP 3000 Successes

MPE/iX Teams Up With HP-UX And Windows NT

KEN DEATS

Spalding Sports (Chicopee, Mass.) is a leading international manufacturer of a line of sporting goods that ranges from Top-Flite golf balls to Etonic athletic shoes to softball bats. Their Chicopee-based MIS department directs the activities of all the company's IT operations around the world.

Long-time loyal HP users, Spalding's CIO and worldwide director of MIS, Bard White, says that mission critical applications still reside on the company's three HP 3000 systems in their home office. "Any system we're concerned about being available 24 x 7 that just cannot take a hit like orders and billings and shipping, that's all mission-critical to us," he says.

The company cannot be accused of tunnel-vision however, and White emphasizes that each global IS site has the ability to choose the applications that best fit their needs without concern to the operating system platform on which it lives. "We let the application reside where it best fits...as long as its not mission-critical or something where we are very concerned about its up-time."

Wide World Of Support

With that eclectic attitude towards interoperability, the firm has amassed a mix of HP-UX and Windows NT servers worldwide. All are networked together along with over 700 PCs or, as in the case with the sales force's laptops, through dial-up facilities.

Citing several examples of the company's open systems attitude, White talks about a new warehousing system soon to be installed across the United States and Canada, that, he comments off-handedly, "happens to run on UNIX." His staff will continue to maintain inventory and orders data and EDI applications on the home office HP 3000s because "we deem them to be mission-critical and we'll upload that [data] to all the UNIX boxes."

Spalding has also added a new accounts receivable package from Collier-Jackson (Tampa, Fla.) and general ledger from Hyperion Software (Stamford, Conn.). Once again, according to White, "we were not concerned with getting all the financials from a single vendor. We left the operating system open and the users went with NT packages, and that was fine."

"They all talk fairly well together," he commented, speaking of HP-UX, MPE/iX and NT. "HP helps make it easy for our MIS staff to go out and work with every site. We make that an issue for MIS to put them all together."

Spalding maintains three HP 3000s at their Chicopee, Mass., headquarters, networked to a mix of HP-UX and NT servers and over 700 PCs worldwide.

Corporate consolidations have also presented a challenge to White and his Spalding MIS team. When the company acquired Etonic shoes, White and his staff acquired an AS/400 as part of the deal. "My challenge is to move that information to Spalding and consolidate it with brand-new applications running on different HP 3000s. HP is ... giving me the tools to manage that well."

HP-UX first made inroads into Spalding for Internet applications, says White. "We've had a UNIX box for Internet for some time, but primarily that's also the brand

new application for our warehouse."

The Internet, or, as White puts it, "the future of selling," is fast becoming an important integration medium as well. While their Web sites are primarily run through host ISPs, they will eventually be brought in house and put on an HP 3000 acting as a Web-server. In fact, he gets excited when the future possibility of using Java on his favored platform is brought up.

"We're excited with the security around [Java] - there's none better for Internet development and all the applications I want to hook that to," he says. He talks about a new Internet-based workforce automation system that will link Spalding's sales force to sales report, inventory and customer credit data and will allow access to competitive data, "with our Internet programmers writing the code for that. If that works well, we will probably purchase a fourth HP 3000."

Two of the largest and most entrenched MPE/iX applications at Spalding are Xantel, Inc's (Eagan, Minn.) AMAPS MRPII and Cognos' (Ottawa, Ont., Can.) QUIZ application development tool. Asked what were his major concerns going into an environment where seamless interoperability would be crucial, White remarked, "being able to grab a transaction that may be resident in an NT physically linked database and processing that on programs running under MPE/iX. We wanted to make sure we could grab that piece of data, move it over and do something with it quickly and easily."

Expanding on his concerns, he added, "we wanted to make sure that if an error occurred we could track down where that error occurred - both hardware and software." Last, but in White's mind maybe most important of all, was speed. "We run a quick response center here. We guarantee any user that if they request a report, we'll have that report out in two hours," he says. "We were concerned about speed across two different machines like that."

Given those primary concerns, White says that Spalding's MIS asked themselves the question, "can we afford to branch out and use these other two, NT and UNIX, or do we strictly have to stay with the 3000?"

A World Of Affirmatives

After much initial success, "we answered in the affirmative," he states. "Now, for our users, we've really opened up the world to them."

Asked for advice to other HP 3000 loyalists who may be considering expanding their platform horizons, White emphasized up front training. "Our people were not familiar with other operating systems," he says. "They were not familiar with working with error sets in UNIX instructions or backup and recovery."

He also stressed building a good tools library for all three systems. MPE/iX, having been in use for some time, gives Spalding's staff "a whole library of tools to choose from. I don't even worry about that anymore." Compared to MPE, White warns of several differences between systems. "There's no internal accounting like who's using the machine, how much they're using it, how much my tape drives are being used, how much space I have left - that sort of thing. It's not as well developed" on UNIX or NT.

White has past experience weaving disparate system threads into a heterogeneous electronic tapestry, having worked with both Wang and IBM. Commenting on working with HP in bringing it all off successfully, he says, "HP helped our systems people out a great deal. I wouldn't have attempted this in a different environment. I wouldn't have tried it in either of the other two [systems]."

Spalding's staff, even with their success integrating HP-UX and Windows NT into their highly-competitive worldwide market, are still HP 3000 die-hards. "We run a $1 billion sales company on three 3000's, 24 x 7, and I don't see that changing at all," White states emphatically. "I would hate to see the 3000 go away. It's an extremely reliable machine."

When the company acquired Etonic shoes, White and his staff acquired an AS/400 as part of the deal. "My challenge is to move that information to Spalding and consolidate it with ... different HP 3000's.

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