July - September 2001 Volume 2/Number 3

Compaq OpenVMS Times

COMPAQ
Inspiration Technology

Compaq and Intel accelerate enterprise server roadmaps

On 25 June 2001, Compaq Computer Corporation and Intel® Corporation announced a multi-year agreement that accelerates availability of next-generation enterprise servers based on the Intel Itanium™ processor family. Compaq will transfer key enterprise processor technology to Intel and consolidate its entire 64-bit server family on the Itanium™ architecture.

The companies will work together to expand marketplace adoption of the Itanium™ processor family. Compaq will build on that high-volume platform to provide its customers with unparalleled price/performance.

This technology and marketing agreement joins Compaq's advanced systems engineering expertise and large installed base with Intel's leading microprocessor design and world-class volume manufacturing capabilities. Compaq will develop the broadest family of server products — from supercomputers to Web servers — that all operate on a single microprocessor architecture: the Itanium™ architecture. Compaq customers will benefit from the most advanced system designs at the lowest possible cost with complete investment protection.

***OpenVMS* strategy going forward:**

- Core Compaq *OpenVMS™* strategy remains unchanged
- Continued development and enhancements of *OpenVMS*
- *OpenVMS* development tools and binary compatibility will be available to ISVs prior to volume release of *OpenVMS* on Itanium-based systems. All *OpenVMS* recognized leadership features and characteristics planned for 2004
- Compaq *AlphaServer™* system clustering capabilities and benefits today will be compatible with Compaq Itanium-based servers tomorrow
- Continued full support of all *AlphaServer* platforms
- Long planning window to ensure that customers maximize their investments moving forward

"The bottom line is we are creating great customer value," said Michael Capellas, Chairman and CEO of Compaq. "Our move to the Itanium architecture provides customers and independent software vendors with the most compelling roadmap to next-generation server technology. Customers get increased performance, price/performance and application support. This reinforces our commitment to customer investment protection as well as providing the best path for future growth. We believe Intel's architecture is the best choice for the enterprise, and for our customers this is truly the best of both worlds."

***AlphaServer* roadmap**

Compaq will continue implementing the *AlphaServer* roadmap per the current plan-of-record, delivering improved performance and faster implementations of the Compaq *Alpha™* microprocessor with EV7 and EV79 versions. In July, Compaq announced the upgrade of the current high-end *AlphaServer* GS series with a 1 GHz *Alpha* processor (see the following article.)

For more information on the *AlphaServer* roadmap and *OpenVMS* plans, please view the presentation, Building Your Business' Future with Compaq *OpenVMS*, delivered by Mark Gorham, Vice President of the *OpenVMS* Group at CETS2001: www.openvms.compaq.com/presentations/openvmsstrategy.htm

OpenVMS in the news

Northrop Grumman, one of our key government partners, issued a press release 6 August 2001 announcing the ahead-of-schedule delivery of the Joint Surveillance Target Attack Radar System (Joint STARS) production aircraft to the U.S. Air Force. *OpenVMS AlphaServer* systems were part of this announcement:

"Northrop Grumman Delivers 11th Joint STARS Aircraft, The First With Commercial-Off-The-Shelf Technology." See **www.irconnect.com/noc/press/** for the press release.

At the same time, Compaq issued a press release announcing the Joint STARS effort as well as other Compaq government wins:

"Off-the-Shelf Compaq *AlphaServer* Systems Power Sophisticated Military Airborne Surveillance System." See press release at: **www.compaq.com/newsroom/pr/2001/pr2001080602.html**

Press coverage on this exciting announcement included:

Informationweek.com, 8 August 2001
www.informationweek.com/story/IWK20010808S0007

The Telegraph Online, 8 August 2001
www.nashuatelegraph.com/Main.asp?SectionID=27&SubSectionID=357&ArticleID=37912

In other news:
On 26 July 2001, Raxco Software, an *OpenVMS* system management partner, announced the release of its latest version of Performance Suite and Raxco Support Suite for *OpenVMS*. Their press release, "Raxco Software Announces New Compaq *OpenVMS* Release of Its Leading System Management Software" details this announcement and can be found at: **www.raxco.com/new/show_details.cfm?NewsItemID=134&type=1**

DEF CON 9 Hackers' Convention declares *OpenVMS* "cool" and "unhackable"

DEF CON, a military term that refers to escalating military conflict conditions, is also the name of a computer hackers' group that meets every year in Las Vegas. At the DEF CON 9 convention, hackers from around the world get together to swap ideas, test and hone their hacker skills, and learn new techniques by playing a game called Capture the Flag.

To many professionals in the computer business, taking an *OpenVMS* system to a place where 4,300 hackers can try to break in for two and a half days is analogous to walking into a back street bar and flashing money around before stepping into the alley for some night air!

Three members of the Dallas Ft. Worth Compaq User Group (the DFWCUG) decided to take an *OpenVMS* system to DEF CON 9 and play Capture the Flag. The contender was a Compaq *AlphaStation*™ 4/233 system with 512 megabytes of memory, *OpenVMS* v.7.2-1H1 operating system, TCP/IP 5.0a, Apache, and Point Secure security software. All software was standard and installed out-of-the-box. Also loaded onto the system were a few added services such as WEBserver pages, interactive Telnet accounts for any hackers who logged into the *OpenVMS* system to hack from the inside, and a public "Games" account for hackers who got tired of hacking!

For two and a half days, the hackers bombarded the server with different TCP/IP attacks and some internal attacks — but none of them was able to break the security or hack into the *OpenVMS* server. Throughout the event, Point Secure Software's System Detective Product recorded every attack and every keystroke, and gave the system an extra layer of protection from the hackers!

On the last day of the event, during the last half hour of the Capture the Flag contest, the judges put a note on the scoreboard that they thought the "*OpenVMS* system was virtually unhackable." Immediately, all hacking attempts against the *AlphaStation* system ceased. For the last half hour of the contest, the *OpenVMS* system coasted across the finish line with not one of the hackers bothering to waste their time on the *OpenVMS* server!

At the DEF CON 9 wrap-up session, the judges declared the *OpenVMS* server "cool" because its services were continuously available and never hacked during the contest. The rest of the hacker teams also gave the server "props" (kudos) as well because they were not able to "root" the system or break in.

Steve Smiley of the DFWCUG delivered a security white paper on what was learned about the hackers' attacks at CETS 2001 in Anaheim, California this month.

For more information, see the DFWCUG Quadwords newsletter at www.dfwcug.org/
Also visit www.defcon.org/, www.pointsecure.com/ and www.cets2001.com/

Announcing C++ version 6.3 for *OpenVMS Alpha* systems

Compaq Computer Corporation is pleased to announce the availability of Compaq C++ version 6.3 for *OpenVMS Alpha* systems, which began shipping to customers on 20 August 2001.

Compaq C++ v6.3 is the most ANSI/ISO compliant C++ implementation in the industry. This new version contains many new features to improve both programmer productivity and application performance.

Highlights of this new version include:

- Conformance to all elements of the ANSI/ISO C++ international standard, with the exception of separate compilation of template definitions using the keyword "export"
- Improved performance for multi-threaded applications
- Support for the GNU dialect for developing portable applications
- 64-bit pointer support

The following documentation is available for Compaq C++ v6.3:

- The C++ Programming Language, Third Edition
- Compaq C Runtime Library Reference Manual
- Compaq C++ Install Guide
- DEC C++ Class Library Manual
- Using Compaq C++ Manual
- Compaq C++ Read Before Installing

Compaq C++ v6.3 is available on a CD-ROM containing the software and documentation, or on the Compaq CD-ROM Software Library for Compaq *OpenVMS Alpha* systems. Browser-based documents are provided on the Layered Products Documentation CD-ROM. Documentation in hardcopy format can be ordered separately.

Part Number	Description
QL-0HQAE-AA	Unlimited-Use License, Workgroup class
QL-0HQAG-AA	Unlimited-Use License, Department class
QL-0HQAQ-AA	Unlimited-Use License, Enterprise class
QL-MJ1AA-2B	Personal Use License, one user
QL-MJ1AA-3B	Concurrent Use License, one user
QL-0HQA9-LD	60-day Software Loan
QL-0HQAA-H8	CD-ROM Kit containing software and documentation
QL-0HQAA-GZ	Documentation Kit

A 60-day software loan is available for Compaq C++. Please see the Web location below for more information. Various support options are available for Compaq C++. Contact your local Compaq office for more details.

To order Compaq C++ for *OpenVMS Alpha* systems in the U.S. and Canada, call toll-free, 1-800-344-4825. To order in other countries, contact your local Compaq sales office.

For more information on C++, visit www.openvms.compaq.com/commercial/cplus/cplus_index.html

Terry Shannon on *OpenVMS*

Be careful what you wish for...

For well over a decade, an architecture-independent *OpenVMS* port has ranked high on the *OpenVMS* customer wish list. While the *OpenVMS* Group has conducted several feasibility studies, the last serious effort to develop an architecture-independent port of Compaq *VMS™* took place almost 15 years ago and was never completed. DEC last revisited the portable *VMS* scheme in 1994, but the firm ultimately decided to reinvigorate the OS through the Windows Affinity Program rather than via portability.

Accordingly, *OpenVMS* and the *Alpha* architecture remained inextricably intertwined — until quite recently. Compaq's 25 June announcement of its decision to consolidate all 64-bit enterprise server development on the Itanium™ processor family architecture not only came as a surprise to the marketplace, but the initiative presages some profound changes on the operating system front. *OpenVMS* will at last shed its dependence on the *Alpha* architecture.

Migrations are never fun, and never pretty. That said, the road to IPF may be the best path forward for *OpenVMS.* Implicit in the Itanium™ consolidation is Compaq's recognition that the *Alpha* "sustained performance advantage" value proposition would be marginalized over time, and that continued *Alpha* development would be economically unviable.

Fortunately, there is little question about the technical viability of an *OpenVMS* port. During the Compaq *VAX™-to-Alpha* transition almost a decade ago, *OpenVMS* developers re-coded a number of OS components including device drivers and executive modules in C, thus rendering a subsequent port a less daunting exercise. The *OpenVMS* team already has ordered Itanium™ hardware. According to a senior developer, engineers are making good progress on figuring out how to handle the Itanium™ port: "We are digging into the Intel processor and console primitives in order to figure out how to use them to implement the things we currently get from the *Alpha* architecture."

In other words, the *OpenVMS* team is grappling with the issue of using a new set of architectural building blocks while continuing to present the current *OpenVMS* paradigms of IPL, software interrupts, page protection, PTEs, stack switching, granularity hints, and so forth to the upper layers of software. It'll take a while to come up with better answers to these questions, but chances are good that additional information will be forthcoming.

Terry C. Shannon, consultant and publisher of Shannon Knows Compaq (SKC), has more than 25 years' experience in the IT industry as an *OpenVMS* system manager, programmer, analyst, journalist and consultant. Mr. Shannon's opinions are his own and do not necessarily reflect the opinion of Compaq Computer Corporation. — Editor

Mark your calendar! DECUS France Symposium

23-25 October, Paris
DECUS France and FTUG invite you to participate in the next French Symposium for Compaq users, which will take place in Paris from 23 to 25 October 2001 at the Les Salons Etoile St Honoré 21-25 rue Balzac 75008 Paris

For more information about this exciting event in the City of Lights, visit www.decus.fr

Customers comment on *OpenVMS*

"Part of our strategy, and our success as well, is to rely on the* OpenVMS *operating system — which I still consider one of the best systems in the world."

Jürg Spillmann, Member of the Management Board, SWX Swiss Exchange and Eurex, Chief Information Officer

For the complete story, visit www.openvms.compaq.com/openvms/brochures

OpenVMS IPv6 Starter Kit now available

As part of the Compaq Telecommunications Group Silver Partner Program, the *OpenVMS* organization and Compaq Telecom Group are pleased to introduce the *OpenVMS* IPv6 Starter Kit. The kit will help customers and partners prepare for the next generation of software and services that will be developed with the advent of new, enabling technologies such as IPv6 and Mobile IP.

The *OpenVMS* Starter Kit provides a basic test and the latest development system, including all necessary hardware and software. It includes an *AlphaServer* DS10 system preloaded with *OpenVMS* v.7.3 and TCP/IP Services for *OpenVMS* v5.1, which includes both IPv4 and the latest Internet Protocol, version 6 (IPv6).

You can use the *AlphaServer* DS10 system as a router and create your own IPv6 enterprise environment. You can also use it as a development system and take advantage of the features of IPv6 — such as extended IP address size, multicast and anycast, and more efficient Mobile IP and autoconfiguration as you develop innovative applications or enhance existing ones. Compaq networking solutions allow you to specify IPv4-only, IPv6-only, or dual-mode IPv4/IPv6 networking environments. The *AlphaServer* system can support any of these three modes of networking.

The *OpenVMS* Starter Kit is IPv6-enabled, which means it includes the hardware and software to develop IPv6 applications on the highly available, reliable and scalable *OpenVMS* platform. It also has the software necessary to develop IPv6 applications on an *OpenVMS* system, including:

- *OpenVMS* operating system version 7.3
- E-business applications licensed with the operating system including Secure Web Server, Java SDK, Fast VM, Attunity Connect, XML Technology, RTR, Enterprise Directory, COM and Bridgeworks
- Enterprise Integration Package (EIP) with licenses for TCP/IP Services for *OpenVMS* (which includes the IPv6 capability), Office Server, DECprint Supervisor, ABS, DS NT, DECnet-Plus End System, and DECwindows MOTIF
- Licenses for C++
- Media for all of the above products

Order your *OpenVMS* IPv6 Starter Kit, part number CT-SKVMS-A1 now! CSA members should order part number CT-SKVMS-A1 from the CSA Web site, www.compaq.com/csa. Standard discounts apply.

For more information on IPv6, see www.compaq.com/ipv6/next_gen.html

New EV68 CPU adds even more punch to *OpenVMS AlphaServer* systems

Compaq recently announced *AlphaServer* GS series and *AlphaServer* DS20E systems powered by the new EV68 (*Alpha* 21264A) CPU.

The new *AlphaServer* GS series systems running the *OpenVMS* operating system offer the same high availability, scalability and resilience to failure as the original *AlphaServer* GS series — only they're much faster. These systems feature:

- Up to 32 EV68 CPUs at 1001 MHz with 8 MB on-board cache per processor

- 7 percent increase of central system clock speed
- 256 GB (¼ TB) *Very Large Memory (*Compaq *VLM™)* support
- Enterprise-class I/O: up to 64 PCI buses with 224 PCI slots
- Online servicing, expansion and upgrades through hot-swap and hot-add of major components
- Up to eight dynamic hardware partitions capable of running different operating systems and versions (such as *OpenVMS* v7.3, *OpenVMS* v7.1, Compaq *Tru64™* UNIX, Linux)
- Up to eight dynamic *OpenVMS* instances (*OpenVMS* Galaxy) with the ability to move CPUs between instances to get EV68 power to critical applications when and where it's needed

The new *AlphaServer* DS20E system running *OpenVMS* is equally impressive from a performance and availability standpoint. In addition, Compaq's fastest two-way server is extremely affordable. Features include:

- Up to two EV68 CPUs (*Alpha* 21264A) at 667 or 833 MHz
- 4 GB ECC memory support
- I/O: up to six PCI slots
- Hot-swap and hot-add power, fans and drives
- Support for Compaq *OpenVMS*, *Tru64* UNIX and Linux operating systems

Commenting on the new EV68 processor, Dietlinde Kellner, IT Manager, Bank Austria/iT-Austria, says, ***"Based on a recent evaluation of an* OpenVMS AlphaServer *GS160 system with EV68 chip technology, we see the potential for an approximately 30 percent performance improvement for our treasury application that runs on* OpenVMS AlphaServer *systems. This increase in performance will allow us to continue to be there and be fast for our traders."***

Specifically designed to handle the most demanding e-business applications and customer environments, *AlphaServer* GS series and *AlphaServer* DS20E systems are available now through Compaq and Compaq authorized enterprise resellers.

For more information on Compaq *AlphaServer* systems, visit www.compaq.com/alphaserver/

OpenVMS Tech Tip

In a cluster with heavy locking, you can experience delays due to credit waits between nodes. This can be checked with $show cluster/cont then add conn,cr_waits and looking for large cr_w values after VMS$VAXcluster. Starting in *OpenVMS* v7.1, there is a sysgen parameter to increase the credit values on a node; Cluster_credits with a default value of 10. Increasing Cluster_credits will consume npagedyn. See *OpenVMS* v7.1 new features manual and SYSGEN help on Cluster_credits for details.

New! Compaq Availability Manager v2.0

Released in May 2001, the Compaq Availability Manager version 2.0 is a valuable tool for *OpenVMS* system managers — especially those who must maintain high availability across large data centers.

Availability Manager is a real-time monitoring and diagnostic software application that is free to all users of *OpenVMS*. By using this tool on either an *OpenVMS* or Windows NT system, you can examine data for multiple *OpenVMS* systems simultaneously.

Here's what's new:

- **Group status at a glance** — A new color scheme displays the status of all nodes in a group, whether or not that group has been selected.
- **More support for new operating system features** — New support has been added for *OpenVMS* managed objects, which provide additional details and new data. Managed objects are currently available only on *OpenVMS* v7.3.
- **New switched LAN displays** — When monitoring *OpenVMS* v7.3 nodes with managed objects enabled, additional cluster data and fixes are available for LAN virtual circuits, including enhanced LAN virtual circuit summary data in the Cluster Summary and LAN Virtual Circuit Details (NISCA) windows.

- **New user-defined event notifications** — You can now enable user event notifications, similar to those available in DECamds, on both Windows and *OpenVMS* platforms. Users can specify scripts to be executed when events occur, and these scripts can perform actions such as sending e-mail or phoning a pager.

- **Preliminary *AlphaServer* GS series/*OpenVMS* Galaxy support** — When you monitor *OpenVMS Alpha* v7.3 nodes, the software provides new information to support NUMA or *OpenVMS* Resource Affinity Domains (RADs).

- **Built-in browser for display of online documentation**

- **Built-in Java run-time environment on *OpenVMS***

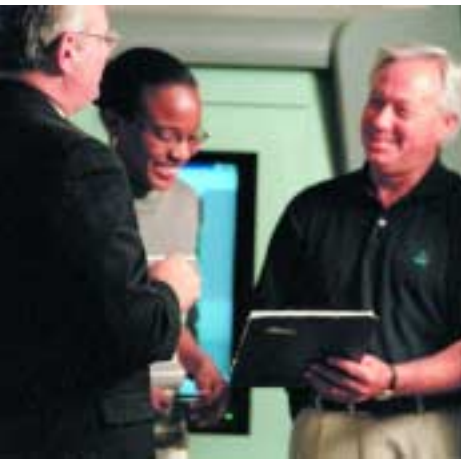
- **ODS-5 file system support**

For more information, visit www.openvms.compaq.com/openvms/products/availman/

Working together: BMC Software and Compaq *OpenVMS*

By Kurt King, BMC Senior Product Marketing Manager

BMC Software, Inc., the leading provider of enterprise management, has been a strategic partner with Compaq for years. This relationship is based on BMC Software's support of all Compaq platforms, and the depth and breadth of application availability solutions for complex, heterogeneous enterprises.



BMC Software and Compaq are working closely together to enhance the management support for *OpenVMS*. BMC Software offers advanced performance management capabilities for the *OpenVMS* platform with the PATROL for *OpenVMS* Performance Solutions. The PATROL solutions are a suite of management products that provide the ability to monitor and manage applications, databases, middleware, Internet platforms and operating systems across the enterprise.

PATROL for *OpenVMS* is an availability solution that automatically monitors and manages *OpenVMS* systems and related resources. In addition to monitoring, PATROL for *OpenVMS* can take corrective actions when things are about to — or do — go wrong. PATROL quickly determines and ensures the availability and performance of *OpenVMS* servers. PATROL for *OpenVMS* — Perform and Predict — is the performance solution that combines data analysis and prediction based on *OpenVMS* with data storage and graphical display based on Microsoft Windows. It also has an analysis component that uses standard operating performance measurement data from *OpenVMS* MONITOR to provide business-process relationships between underlying computer resources. This solution provides a performance-modeling component, which uses what-if analysis to evaluate the impact of changes on the system — without affecting the current configuration.

Other BMC Software solutions for *OpenVMS*, which run on both *Alpha* and *VAX* servers, include:

- PATROL for Oracle — database management
- CONTROL-M — job scheduling and production management
- CONTROL-SA — security administration
- CONTROL — output management

For more information about BMC Software's *OpenVMS* solutions, visit www.bmc.com/openvms or contact BMC directly at 1-800-291-4262.

5GM Ltd. announces telex and fax support for ALL-IN-1/Office Server

Textel Relay, a unified messaging application from *OpenVMS* ISV 5GM Ltd., allows companies to send and receive e-mail, fax, telex and EDI messages from *OpenVMS*. The application allows both terminal and PC users using Microsoft Outlook, Compaq TeamLinks or Web browsers to integrate seamlessly with Compaq Office Server or ALL-IN-1 servers. Textel Relay provides the ability to:

- Integrate with WPS-PLUS and WordPerfect
- Send from e-mail and word processing index screens
- Send telex text validation at source

- Use nicknames and distribution lists
- Have natural and seamless extension of usual ALL-IN-1 facilities
- Receive confirmation of message status delivered into ALL-IN-1
- Obtain modifiable and default transmission details
- Automatically generate fax header pages
- Accommodate attachments and cover notes
- Use queue inquiry and message removal facilities
- Automatically deliver incoming fax and telex to mailboxes
- Address fax and telex messages from any MAILbus gateway
- Send directly from *VMS* Mail, MAILworks and ALL-IN-1
- Use standard MRGATE addressing mechanism and confirmation of message status to originators

For more information, contact Dennis Armstrong at DA@5gm.com

OptimalJ supports *OpenVMS*

At the JavaOne conference in June, Compuware announced OptimalJ, a visual Java modeling and generation tool for Java development. This high-end Java development tool supports *OpenVMS*.

OptimalJ is an advanced development environment enabling the rapid design, development and deployment of J2EE applications. With OptimalJ, developers interact with a visual model of the application and automatically generate the code needed to implement a complete n-tier application. Using this visual paradigm, developers are shielded from the complexity of coding to the distributed J2EE environment. Less experienced Java developers can quickly build or modify business applications. Advanced developers are freed from many repetitive coding tasks and can focus on architecture refinements and customization.

For more information, visit www.compuware.com/products/optimalj/

Hits on *OpenVMS Times* Web site growing exponentially

The *OpenVMS Times* is enjoying a continually wider readership. Check out these numbers. In January 2000, the site had approximately 4,000 hits. In June 2001, that number was 18,000 — a growth of more than 400 percent!

Actual readership is even higher since these numbers don't include the readership of partners who post the *OpenVMS Times* on their own sites. We're delighted to help spread the good news about *OpenVMS* around the world!

New partner Twobyfour Software enables genuine 24 x 7 Service Level Agreements

Twobyfour Software, a new Compaq partner, provides tools and products that make it possible to ensure application management on any platform and Enterprise Management System (EMS). As a result of customer requests, Twobyfour Software has developed an *OpenVMS* surveillance kit and is developing a soon-to-be-released RTR probe.

The company's application management solutions take an application-centric view of how to meet the growing demand and increased usage of Service Level Agreements (SLAs). Today, customers are increasingly aware of the importance of performance, scalability, availability and security of applications in order to run a business successfully. Because Twobyfour Software's application management tools are available for any platform and EMS, investments already made in hardware and development are protected. Any application developed in-house can be managed by Twobyfour Software's tools to ensure that business-critical applications meet the reliability and performance demanded by today's business climate.

OpenVMS surveillance kit

Some *OpenVMS* customers asked for a management tool for the *OpenVMS* operating system that was easy to use and could be managed from existing EMSs, such as BMC PATROL, HP OpenView and IBM Tivoli. With Twobyfour Software's surveillance kit, now they have it.

RTR probe

Other customers requested a way to manage Compaq Reliable Transaction Router (RTR) within their current EMS. Twobyfour Software's RTR Probe was developed to allow for just that. The RTR Probe has been tested by Compaq partner OM Technology of Sweden — the industry's leading provider of exchange technology — and was released in August. The first release integrates with BMC Patrol. Integration with other EMSs will be made available on a case-by-case basis.

For additional information, visit www.twobyfour.com

Customer perspective on the Compaq and Intel June 2001 announcement

"At Rolfe & Nolan, we are very encouraged by Compaq's announcement about the plan to port* OpenVMS *to Itanium™. This announcement adds further support to our belief in* OpenVMS Alpha *as one of the key platforms for our software in the next few years, and we will be working closely with Compaq* OpenVMS *engineering to see how best to harness this technology."

John Lodge, CEO, Rolfe & Nolan, London

OpenVMS Portal* makes software shopping easier

The *OpenVMS* Portal recently celebrated its first birthday! *OpenVMS* launched the portal to help customers find information, get online training, ask questions and locate people with *OpenVMS* expertise. In keeping with our promise to enhance the portal, we've recently added a few new features.

First, in response to requests for an online catalog, we introduced a catalog of software from the Compaq *OpenVMS* Group with part numbers, U.S. prices and links to Software Product Descriptions (SPDs) for CETS 2001. By the end of 2001, we expect to have a complete listing of all active software products from the *OpenVMS* Group.

Next, we added a significant number of products to the *OpenVMS* Portal eStore. The top-selling *OpenVMS* software — software and licenses — can now be ordered in the eStore. These software products include: ABS, ACMS, C, COBOL, DECforms, DECnet, DECram, DECset, DECwindows, Disk File Optimizer, Enterprise Directory, FMS, FORTRAN, *OpenVMS* Galaxy, Graphic Software, Office Server, *OpenVMS Alpha*, *OpenVMS* Clusters, *OpenVMS VAX*, PATHWORKS Client, PATHWORKS Server, TCP/IP, Volume Shadowing, and X.25. Customers and partners will be able to find the software, get the license, order and pay online!

In addition, we're constantly adding new "cool" items with the Compaq and *OpenVMS* logos, including hats, mugs and pens. We add new logo products to the eStore throughout the year — so check early and often.

Finally, we also made it easier to pay for eStore purchases. In the past, the eStore accepted only credit cards. Now the eStore also accepts purchase order numbers. There's also a field for your Digital Business Agreement (DBA) number, which allows Compaq to track and apply all discounts.

If you haven't visited the *OpenVMS* Portal lately — or if you've never visited before — check us out at www.openvms.compaq.com/portal and see how we're growing!

*Available in the U.S. only

Future looks good for *OpenVMS* and PowerTerm Host Publisher

PowerTerm Host Publisher from Ericom Software helps organizations Web-enable existing applications running on any host computer. Now *OpenVMS* platform customers can have the best of both worlds — unprecedented performance and stability offered by *OpenVMS*, coupled with the tremendous opportunities offered by PowerTerm Host Publisher.

PowerTerm Host Publisher quickly integrates and Web-enables existing *OpenVMS, Tru64* UNIX and Compaq *NonStop™ Kernel™* (NSK) applications into powerful e-business solutions. With PowerTerm Host Publisher's Web-enabling technology, Web-enabling and redeployment of existing applications has become even more cost-effective.

PowerTerm Host Publisher breathes new life into corporate assets by extracting business procedures from existing applications and immediately exposing their functionality for reuse in new application environments. With PowerTerm Host Publisher, a Web-based front-end incorporates the stable business logic from the existing system and presents information in intuitive HTML format with click-through navigation. The XML presentation layer is also possible.

Process-oriented rather than screen-oriented, PowerTerm Host Publisher is ideal for the application integration needs of any size organization. One major advantage is the similarity in which both block-mode and character-mode host applications can be quickly redeployed for the Web.

PowerTerm Host Publisher provides programmatic access to the core business functionality implemented by the existing robust *OpenVMS, Tru64* UNIX and NSK applications via an Application Program-ming Interface (API). This allows integration between disparate corporate applications, Web-enabling of existing corporate applications and added functionality. Achieving these goals is crucial for organizations to get the most from their existing software and hardware assets.

PowerTerm Host Publisher offers a non-invasive approach, requiring no modifications to the existing applications or additional software installation on either the host computer or the individual client.

For more on PowerTerm Host Publisher and Ericom's e-business solutions, visit http://ebusiness.ericom.com or e-mail hostpub@ericom.com

Oracle questions of the month

Q: Will Oracle on *OpenVMS* offer Real Application Clustering (RAC)?

A: Oracle9*i* Real Application Clusters run a single database on a group of servers that are clustered together to provide increased scalability and reliability — without any change to applications.

Oracle plans two versions of RAC. The first version, 9*i* RAC, will ship on all Compaq platforms. It is now available on *OpenVMS* — far exceeding the goal of shipping 90 days after *Tru64* UNIX. RAC is essentially the renaming of Oracle Parallel Server (OPS) with some performance enhancements.

The second version, called Extended RAC, further improves scalability and reliability by incorporating Compaq *TruCluster™* technology. Present plans are to ship this exclusively on *Tru64* UNIX in the fourth quarter of 2001.

Q: What are the plans for certifying Oracle Rdb on new versions of the *Alpha* processor?

A: Oracle is presently in the process of certifying Rdb 7.0.6.2 on *Alpha* EV68. This was released in September.

Tips from the *OpenVMS* Performance Expertise Center

Scaling for E-Business: a review

Over the years, the authors' work in the capacity planning/performance analysis field has led them to the conclusion that understanding the context from which the customer views the system is paramount to showing the customer the effects, negative or positive, of system performance on their business problems. The brave new world of e-business is no exception. This article reviews a book that can provide the performance analyst with this needed context.

The book is **Scaling for E-Business** by Daniel A. Menasce and Virgilio A. F. Almeida, published by Prentice Hall PTR, ISBN 0-13-086328-9.

The book begins by stressing that only controlled and methodical approaches to capacity planning result in success, and then develops an e-business reference model. The reference model discussion gives a good overview of the architectural components of an e-business site.

Next, the book introduces Customer Behavior Models and Client/Server Interaction Diagrams. Customer Behavior Models capture the various paths that an e-business customer will take through the site. Client/Server Interaction Diagrams capture the client server interactions necessary to perform e-business functions. Both of these techniques offer value to the e-business capacity planner.

The next section discusses the prototypical aspects of e-business infrastructure, along with examples for capacity planning. This discussion includes an examination of typical Web site components, multi-tier architecture implementation and dynamic load balancing. In addition, special attention is paid to the performance aspects of authentication protocols and secure electronic transactions.

The next major section of the book presents a capacity-planning methodology for e-business, and though some of this section will be a review for experienced analysts, there are a good number of well thought-out examples to illustrate the main points. The last section presents some good case studies.

In summary, this is an excellent book for the capacity planner who wishes to develop a context for capacity planning in an e-business environment.

Customer perspective on the Compaq and Intel June 2001 announcement

"This announcement has all the earmarks of a very good decision. It allows Compaq to focus on its strengths. I remain very comfortable using* OpenVMS *on* Alpha *today and see no technology constraints on our future plans."

Danny Friel, Chief Information Officer
International Securities Exchange

For the complete story, visit www.openvms.compaq.com/openvms/brochures

Customer perspective on the Compaq and Intel June 2001 announcement

"The alignment of Intel and Compaq 64-bit servers on Intel's Itanium™ chip architecture is very good news for us.* OpenVMS *has always been a stellar operating system and this announcement puts* OpenVMS *back in the mainstream."

Cliff Pedersen, Manager, Operational Support Systems, Process Control and Information Technology, Suncor Energy, Inc.

Tips from the *OpenVMS* Performance Expertise Center

An end user view of scalability

For *OpenVMS* customers with growing workloads, scalability is a key consideration. The term "scalability" has different meanings and can sometimes be a source of confusion.

End-user scalability is the ability to achieve substantial increases in the capacity to do real work by adding resources systematically. Scaling is achieved if completed user work increases with each resource increase. The larger the increase in completed work — and the larger the number of possible incremental steps — the better the end-user scalability.

Through experience with each of the four following methods of adding resources, we find that end-user scalability varies widely. Factors include application type, software architecture, the resources used and the investment made in tuning. The best way to estimate potential scalability is by benchmarking individual applications similar to the workload in question.

Methods of adding resources include:

- **Flexible configuration** — the ability to plug a maximum number of CPUs, controllers, adapters, memory, etc. into a given system model. Configurability is one way of adding resources, but by itself does not guarantee any particular level of end-user scalability.

- **Scaling up** — replacing a less powerful system model with a larger, more powerful model. The actual end-user scalability achieved when adding resources by scaling up will vary.

- **Scaling out** — growing by installing additional physical systems. The actual scalability achieved when scaling out is not necessarily linear with the number of systems added. Software architecture and design typically are the key factors that determine achievable capacity growth when scaling out. Design changes may be required for best results.

- **Feeds and speeds scaling** — replacing slower components with faster components (for example, replacing an EV67 processor with an EV68). End-user scalability is not necessarily linear with the increase in component speed.

Here's the bottom line: For customers with growing workloads, many choices are open to achieve scaling to match that growth — including using empty slots, upgrading to a larger system, adding more systems and employing faster components. In all cases, it is the delivered scalability that really counts to the customer. Next month we will discuss how to assess scaling results achieved as resources are added.

Customer perspective on the Compaq and Intel June 2001 announcement

"We were very pleased to hear that Compaq plans to port OpenVMS *to Itanium™ as this further strengthens the business case for global banks to rely on the Montran Global Payments System and* OpenVMS *to drive their payments and messaging business.*

"We're working with Compaq to define our porting plans for Itanium™ with the aim of offering GPS on OpenVMS*/Itanium™ after 2004 and plan to continue marketing and supporting GPS on* Alpha *for the foreseeable future."*

Marty Walsh, VP, The Montran Corporation

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