

This special issue of *Computing News* is devoted to important computing developments taking place in the next few months. For a quick overview of the changes, take a look at the *Summer Happenings* table below.

VAX Systems Get AXPed

As those of you who follow the trade press may already know, Digital Equipment Corporation is superseding their venerable VAX product line with a new line of timesharing computers known as AXP (Alpha EXTended Processors). These systems are based on a new architecture that provides much faster CPU speed, larger memory capacity, and greater future expandability than the VAX architecture. Although the hardware architectures and instruction sets of the two systems are completely different, both run nearly identical versions of the OpenVMS operating system. Users who do not develop programs of their own will notice little, if any, difference.

Last fall, the Computing Center added a DEC 7000 AXP system called DAISY to the VMScluster, the first stage of the VAX/AXP migration process at the UO. Thus far, it has been used primarily to familiarize Center staff with the new line and the conversion of VAX software to AXP. DAISY integrated into the system quite smoothly, and the software conversion has progressed on schedule. Database server portions of the BANNER/ORACLE system are now being moved from DONALD to DAISY.

During summer term, both of the current VAX 6000 systems will be replaced with DEC 7000 AXPs...

OREGON in early July, and DONALD in early September. We expect reasonably brief service interruptions on the machines while they are being upgraded. Other cluster members will not be affected during the upgrades (e.g., DAISY and DONALD will operate as usual during the OREGON upgrade.) Watch VMS log-in messages for exact schedules as the above dates approach.

There are a few important differences between VAX and AXP systems of which users need to be aware:

- Each of the new machines will have three CPUs and one gigabyte of memory. Additional disk controllers and drives have already been added to the cluster as part of the upgrade.
- All standard VMS commands and utilities are virtually unchanged. DCL, the text editors, the MAIL utility, etc., appear and operate just as before. Note that the EDIT command now invokes EVE rather than EDT (the EDT command still runs EDT).
- All VAX programs must be recompiled and relinked to create native AXP images. If that is impossible (due, for example, to missing source code), some executable code can actually be translated, using a facility called

DECmigrate (or VEST). However, this translation results in somewhat slower execution than a native AXP image. All AXP compilers are basically source-code compatible with their VAX counterparts, with the exception that the AXP C compiler follows a stricter ANSI-standard implementation. Also, certain VAX data types are not supported on AXP. You will also notice that AXP's EXE files are larger, due to a greater number of longer instructions generated. If you are converting your own program(s), you should consider visiting with a Computing Center large systems consultant, who will provide references to the appropriate DEC migration manuals (note, also, the information on BOOKREADER and VTBOOK documentation below).

- Third-party VAX software packages must be updated to AXP versions. The only major supported software that the Center has not been able to update (due to the current lack of AXP versions) are EQS and SPSS. We are hoping that AXP versions will become available soon. Nearly all unsupported public domain software on the cluster has also been converted to AXP.

The OpenVMS VAX manuals in the Documents Room will not be replaced with corresponding AXP versions. All new documentation is available online in the form of CDs that must be accessed using the DECwindows BOOKREADER program from an X-terminal or emulator, or via the unsupported VTBOOK utility from a character-cell VT terminal or emulator. The Documents Room staff can show you how to use BOOKREADER, and VTBOOK help is available by typing

`$ help @unsupported vtbook`

while logged in on VMS.

Important Summer Happenings

Dial-in modems require a network i.d. (<i>netid</i>)	June 25
FIS and new CC accounting system go online	July 1
Account index required for all chargeable items	July 1
OREGON changed from VAX to AXP hardware	July 12
GLADSTONE student network server goes online	July 18
DONALD changed from VAX to AXP hardware	Early September

Watch for Accounting Changes

On July 1, 1994, several major accounting changes are scheduled to go into effect simultaneously:

Account Indexes. With the advent of the new University-wide FIS accounting system, Computing Center project numbers and state account numbers identifying departments and agencies will be replaced by a new scheme of alphabetic codes known as "account indexes." Account index codes will be used to record all chargeable transactions with the Computing Center, such as micro-computer repairs, scanner exam scoring, and supply purchases. All such transactions must be paid for either by supplying an account index code or paying cash.

VMScluster Charges. Charges for VMScluster computing time, disk space, and printing will no longer be assessed on an as-used basis, and cash accounts will no longer be available. These changes will not markedly affect *supported accounts* (accounts funded by the UO in support of academic and administrative programs), other than the fact that budgets will no longer be a consideration.

All *direct account* holders (accounts funded by grants and state account numbers) will notice important changes. UO departments with direct accounts using more than \$5000 of VMScluster resources during the 1993-94 fiscal year will need to negotiate a fixed-cost service contract with the Computing Center for machine services in '94-'95. In June, the Computing Center will alert those above the \$5000 limit so that a contract may be negotiated.

During fiscal 1994-95, resource accounting for both VMS and UNIX systems will be combined, and some auxiliary departments may find themselves above the \$5000 limit for the first time. These departments will need to negotiate a machine-use contract for '95-'96.

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With the addition of the new student network server, GLADSTONE, and the VAX/AXP upgrade (see "VAX Systems get AXPed" in this issue), the need for cash accounts disappears. Under the new accounting system, those UO faculty, staff, and students who formerly utilized cash accounts will now be eligible for a standard timesharing account on OREGON, DARKWING, or GLADSTONE.

Use SPSS on DARKWING

The Computing Center has not yet received a version of SPSS for AXP. Until the new version arrives, SPSS users should plan on running SPSS on DARKWING. A handout describing how to move SPSS command- and system files from OREGON to DARKWING is available in the Documents Room. If you have additional questions, contact Audun Runde (telephone: 346-1714; e-mail: audun@oregon.uoregon.edu)

GLADSTONE Gives Students Full Internet Access

During the week of July 18, the student e-mail server, *DuckMail*, will be replaced by GLADSTONE, a newer, more powerful UNIX SPARCenter computer that provides full Internet access. GLADSTONE will offer the standard set of Internet communications software, plus some additional applications as yet undetermined.

During the transition period, existing *DuckMail* accounts will be transferred to GLADSTONE, with only a brief interruption in service. E-mail sent to a *DuckMail* address will be automatically routed to GLADSTONE until the beginning of fall term. However, students are urged to inform their correspondents of their new GLADSTONE address and change any references to *DuckMail* in mail forwarding or signature files as soon as possible. Student e-mail addresses will now look like this:

`username@gladstone.uoregon.edu`

Students will not need to purchase a CC-EMU lab pass to use GLADSTONE unless they wish to continue sending and receiving e-mail at the CC-EMU Microcomputing Lab.

Apply for Timesharing Accounts Online

Beginning in mid-July, all University users will be able to apply for Computing Center timesharing accounts online. Faculty, staff, and graduate students are eligible to apply for VMScluster accounts on OREGON; faculty and graduate students may obtain accounts on DARKWING; and all registered students are eligible for accounts on GLADSTONE, the new student network server. Faculty and staff who wish to set up an account on one of the other VMScluster systems (DONALD or DAISY), should contact Connie French, the Computing Center's accounting clerk (e-mail: connie@oregon.uoregon.edu; telephone: 346-1738).

To apply for an account online, first access UOnet the way you normally would, then connect to a system called AUTHORIZE and enter the word *authorize* as the username:

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UOnet> c authorize
Username: authorize
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Follow the online instructions to complete your application. This procedure is outlined in more detail in a handout titled "User Self-Authorization Instructions," available free of charge in the Computing Center Documents Room (Room 205) and downstairs reception desk (Room 108).

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