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# INFOSPHERE

MU HEALTH SCIENCES COMMUNITY

## E-Mail Transition

Reliable E-Mail is Now as Essential as a Working Telephone,  
Driving the University to a Centrally Managed E-Mail System

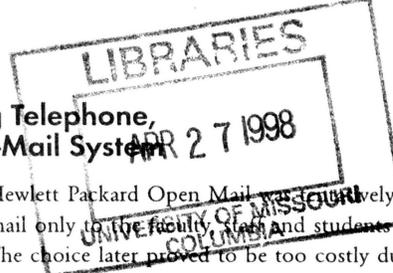
For those who haven't heard the news, there's a new e-mail system coming to the UM campuses. The existing heterogeneity of e-mail platforms will soon give way to a single centrally managed e-mail system to serve all UM faculty and staff. That system will be Microsoft (MS) Exchange running on large scale Windows NT servers. MS Outlook will be the preferred workstation client, though e-mail can also be accessed via Netscape. Originally, it had been the intention of the Health Sciences e-mail group that all e-mail accounts and post offices would be migrated and dismantled by July 1, 1998. Jim Horton, the e-mail server administrator for the Health Sciences Exchange site and overseer of the Health Sciences migration to Exchange, noted that the July 1 target date has been moved back to December 31 of this year.

### Why the Migration to Exchange?

Since its inception in the campus environment, e-mail has grown from a useful tool for localized electronic communication to a mission critical communication resource of university wide and even international scope. The availability of reliable e-mail is now as essential as a working telephone. This reality has driven the coming institutional shift to a single centrally managed e-mail system distributed at the enterprise level. Also, the e-mail environment as it presently exists has a number of significant problems that render it unsuitable for continued use:

- The environment is increasingly difficult to maintain because of its distribution of resources and management;
- There is no mechanism for assuring the uniformity or quality of equipment supporting individual e-mail post offices;
- There is not 100 percent compatibility between the different e-mail systems, leaving the environment vulnerable to directory synchronization problems and causing errors in the global directory;
- Some of the mail packages in current use are not sufficiently scaleable to meet the growing demand for service (cc:Mail, in particular, suffers frequent database corruption due to the program's poorly implemented record locking and manipulation).

The decision to move to an enterprise-based e-mail system is not a recent one. For several years, a University-wide committee has reviewed a number of e-mail applications in the search for an enterprise-level solution. Among those packages initially reviewed,



Hewlett Packard Open Mail was originally chosen to provide e-mail only to the faculty and students of the UM systems. The choice later proved to be too costly due to HP's insistence that support for their Open Mail product would be contingent upon its operation on their hardware. This setback prolonged the e-mail search until last year, when Microsoft Exchange was selected. Initially, Exchange will provide e-mail and scheduling to the faculty and staff of the UM systems. Student e-mail will be maintained separately until the Exchange platform can be expanded sufficiently to handle the added traffic. In the Health Sciences Exchange site alone, at least 5,000 mail accounts have been marked for migration.

Each of the five e-mail sites will have two dedicated servers and a minimum of two domain controllers. The first of the two servers, both of which will run on IBM PC Server 704s, will provide the main mail storage. The other server will serve as a bridgehead (gateway) to the Internet as well as to the other four sites. Additionally, it will house all public folders and will be responsible for maintaining directory synchronization with the other sites. Two IBM PC Server 325's will serve each site as domain controllers to handle user authentication as we move to the Microsoft Single Master Domain model.

### What Will be Involved in the Migration?

As one might imagine, this e-mail migration will not be a trivial matter. Already, the new e-mail user accounts have been generated from the Human Resources personnel records and that is merely a beginning. There is now a significant effort to manually verify and clean up the existing e-mail directory listings so they can be merged with the new Exchange directory to assure uninterrupted mail delivery to each user. A number of meetings have already been held between the Integrated Technology Services and Information and Access Technology Services transition teams and their respective departmental e-mail administrators detailing the directory cleanups and the migration process. The next step will be to select a group of post offices and begin the migrations. A schedule for migrating post offices has not been established due to the number of variables over which the ITS mail group has no control. Originally, it had been planned to completely migrate one post office at a time before moving to the next. This plan has been changed to allow for the more gradual migration of multiple post offices simultaneously. Ideally, the process should occur in the following steps:

Continued

## E-Mail Transition Continued

- 1) ITS will work with a departmental contact person (usually the e-mail administrator for that department) to establish a time for the post office migration.
- 2) The departmental contact person will notify end users that they should prepare themselves for the transition by:
  - i) Obtaining training on the MS Outlook client before their mailbox is converted (ITS will provide numerous training sessions for a variety of experience levels through the course of the migration process).
  - ii) Cleaning out their e-mail and preserving important messages as individual text files or as printouts before the migration begins (There are no guarantees that the existing e-mail data will not be lost in the migration process).
- 3) The Exchange mailbox will be lit up (turned on) for the user being migrated.
- 4) The Outlook client will be installed on the user's workstation
- 5) The user's e-mail will be migrated to Exchange and their old post office removed from service.

Because of the nature of the client installation, it will be necessary to manually install Outlook on every workstation. Clearly, this will be a labor-intensive process, but one that should be well worth the effort. When all is said and done, we will have a single, centrally managed electronic mail and scheduling system that is keyed to the personnel record of each end user, rather than a heterogeneous cluster of post offices with manually created e-mail accounts for which no standards have ever existed.

All information concerning the Outlook class schedule or the migration will be distributed through your e-mail administrator. Please contact them with any questions you might have concerning these issues. Many thanks to Jim Horton who supplied much of the information used in this article.

## ProVide Work Group

**ProVide** is a Cerner software product that addresses the needs of the clinic information users in ambulatory settings using a windows-based functionality. It includes OCF/PowerChart (results reporting), a daily planner, a patient locator, order communications and clinic reporting functions. Structured documentation was originally incorporated as the focal point of the ProVide application, however, Cerner designed it as a separate product. Structured documentation allows outcome management and may reduce the need for transcription by creating documentation on-line. The ProVide and IDXTend work groups are working together to create a more seamless workflow in the outpatient clinics.

Members of the ProVide work group are: Gail Anderson (FCG), Leader; Donna Neal (UP), Associate Leader; Tammy Hickman (UP); Pat Banks (UP); Cathy Schaefer (ITS); Mark Stallbaumer (Cerner); and Dr. Robert Hodge (Fellow).

Accomplishments to date include:

- Completion of Current State

Documents (flow charting, how tasks are done now).

- Developed a document that outlines the scope for the ProVide product.
- Attended design and build classes for the ProVide, IDXTend and Orders Management products.
- Attended training for desktop applications used on the project.
- Identified Pilot Sites:
- Green Meadows Family Practice Clinic (Gold Team)
- UPMB Surgery Clinic (General, Vascular and Pediatric)
- Future activities include:
- Revision and creation of policies/procedures affected by ProVide.
- Review of forms used to do business.
- Develop a master location list for the outpatient areas.
- Pursue a developmental partnership with Cerner for Structured Documentation.
- Design of future state flows and processes.

## Noon Seminar Series

The Tuesday Noon Seminar Series continues in Room GL-03-11 from 12:00-1:00 p.m. on the ground level of University Hospital.

### April 7

Paul D. Gader, Ph.D.  
Associate Professor, CECS  
*Blood Cell Image Segmentation using Fuzzy and Morphological Methods*

### April 14

David B. Oliver, Ph.D.  
Clinical Professor  
Health Management and Informatics  
*The Geriatric Population: Are We Ready for the Baby Boomers?*

### April 21

J. Craig Klimczak, DVM  
Director, University Telecommunications Office

### April 28

Mikel L. Lynch,  
Hospital Business and HSC Administrative Applications Manager

Queries may be directed to the series director, **Dr. John C. Reid**, at **882-8428**. The latest version of the seminar series schedule is available online at <http://www.hsc.missouri.edu/mig/docs/noon97-8.html>.

## Editorial Staff

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## From the J. Otto Lottes Health Sciences Library

### MAXX: Maximum Access to Diagnosis and Therapy



The joint ITS/OME Software Advisory Committee has purchased MAXX for the library HSLNET server. This CD-ROM product includes over 25 of the Little, Brown Spiral Manuals and Handbooks covering general medicine and surgery, internal medicine, ob/gyn, pediatrics, infectious diseases, emergency medicine, obstetrics and nutritional therapeutics—more than 12,000 pages in total. All illustrations are included and, along with text and tables, are searchable.

You may choose to search the entire collection or one section of one book. You may either browse through the books and chapters, or use the hypertext links to navigate between them and the global index, index menus, tables, photos and text references. While the Folio Views search engine can be a bit confusing at times, the substantial amount of information available on this CD-ROM is worth the effort to learn basic searching and navigation.

Some basic tips for using MAXX are as follows:

The first screen presents you with a Command Menu Bar across the top, and a Toolbelt immediately underneath, recognizable by its icons with text. Below is the Reference Window showing that you are in the main menu. Once you choose a book, the Reference Window will show the book citation including title, author and chapter title. The main portion of the screen is taken up by the Document Window, where the text will appear. At the very bottom is the Status Line which shows the current record number and the total number of records, the number of search hits (or how many times your search term appears in the text) and the current query. There are, at least, two ways to browse books. One way is to click on the "Contents" icon on the Toolbelt. This will list all of the books—simply double click on the preferred title and use the scroll bar to navigate through the text. Another way is to click on "Books" in the Main Menu. You will then be able to choose to list the books by subject, by title or to bring up the

global index for all titles. Once you have made your selection, click on the title to get to the text. As mentioned above, use the scroll bar to navigate through the book.

To perform a basic search, click on the Query icon in the Toolbelt. In the "Query For:" box, type in your term or terms. The "word" box above will guess at the terms that you type in so you need not type the whole word. Just click on the appropriate one in the "word" box to paste it into the "Query For" box. The "Records with Hits" box shows the structure of your search and the number of hits that it generated. For example, typing in "tinnitus children or child" will result in 6 hits. Once you have entered all of your terms, choose "OK". You will be presented with a list of book titles that contain your search terms. To the left will be the number of hits found in each book. To view the text, double click on the title. (Clicking on the plus symbol will break it out by section, eventually leading you to the text—a rather long process.) From here, the quickest way to get to the text is to click on the "Next Query Hit" icon in the Toolbelt. To back up to the list of titles, click on the "Contents" icon in the Toolbelt.

You may print either a highlighted section or the full record. The print command is under "File" found on the command menu.

MAXX is available from the library workstations (under "Electronic Books".)

To gain access from a Windows workstation contact your network manager or Denise Hooks in the Health Sciences Library at **882-6141**. You may also email us at [hslrefer@showme.missouri.edu](mailto:hslrefer@showme.missouri.edu).

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Ask an Information Question

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Request an Expert Search

Search MERLIN and Ovid Databases

Register for an Ovid workshop

Register for HSLNET

All of these services are available from our website:

<http://www.hsc.missouri.edu/library>.



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## Pepper and Friends Visit PedsWeb Station

### Special Website was Designed for Use by Patients and Families to Access Health Information

In recognition of Children and Healthcare Week, several Children's Hospital staff members and young patients were featured recently on Pepper and Friends during the KOMU-TV Channel 8 television program's broadcast from the hospital lobby. James Mouser, co-host of the show, visited with Dr. Elizabeth James about care provided in the neonatal intensive care unit and with Dr. Paul Robinson about the special care and activities for adolescents, were among those interviewed.

Included in this program was a glimpse of the PedsWeb station located in Pediatrics. This special website was designed for use in-house by patients and families to help them access health information. The Web station is a resource that will make information available to children, adolescents and adults.

PedsWeb was introduced to the Children's Hospital through an Open House held on December 10, 1997. It is sponsored and supported by Integrated Technology Services.

# Information Management Scores in JCAHO Review

## Organization Considers Information Management Key Element in Quality Patient Care

It is well known that the purpose of a Joint Commission on Accreditation Healthcare Organization (JCAHO) inspection is to review and accredit hospitals. What may not be as well known is that JCAHO considers effective information management to be a key element in providing quality patient care.

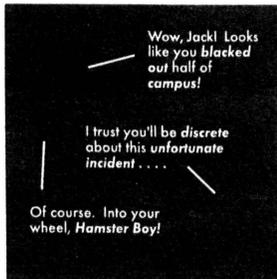
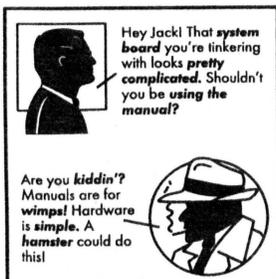
This year, Integrated Technology Services played an important role in gathering and organizing the documentation that supports how the Hospitals and Clinics processes and shares information. Manuals were created to index how HSC:

- develops policies to guide creation of the electronic health care record;
- manages security and confidentiality;

- educate faculty and staff regarding the new technologies.

The Information Management session was led by one of the JCAHO surveyors, Thomas Treat, Ph.D., who is also a hospital administrator. Dr. Treat said that he was most interested in how HSC maintains confidentiality of patient information in the age of electronic information distribution. The HSC has established committees with physician membership; their meetings and actions were carefully documented in the IM notebooks. A subcommittee of the Electronic Health Care Record Committee specializes in security and confidentiality. Plans are in place for scheduled sampling of patient information access to detect unauthorized use.

### Jack Hammer, Network Detective by Alan Arnold



## MedLine/CINAHL/ PsycINFO Workshop Schedule

March	
Medline	10-11:30 Wednesday 11
CINAHL	10-11:30 Tuesday 24
PsycINFO	3:30-5 Monday 30
April	
Medline	3:30-5 Tuesday 7
CINAHL	10-11:30 Wednesday 15
PsycINFO	10-11:30 Tuesday 28
May	
Medline	3:30-5 Monday 4
CINAHL	3:30-5 Wednesday 6
PsycINFO	10-11:30 Tuesday 19

You can search journal literature on the OVID system using Windows or Web. These workshops focus on Windows; you may request Web instructions. Enrollment is limited to eight each. Special dates available. Call **882-6141** or go to <http://www.hsc.missouri.edu/library/docs/wsreg.html> to register or for more information.

Margaret Howell  
Special Collections  
401 Ellis Library