Replacing TigerMail, Groupwise

University getting new e-mail systems

Auburn University is upgrading its e-mail systems for students, faculty and staff in an effort to make electronic communication within the university community more efficient and reliable.

Beginning with this summer’s incoming freshmen, Auburn is migrating from the seven-year-old Groupwise and TigerMail system to two new e-mail systems: TigerMail Live and Microsoft Exchange.

Once the majority of students have started the transition to TigerMail Live, the faculty and staff will start to switch from Groupwise to Microsoft Exchange, beginning in late August.

Although the new systems differ from each other and from existing systems in some aspects, administrators in the Office of Information Technology say the biggest long-term change for most users will be a reduction in problems that are commonly associated with older e-mail systems.

TigerMail Live and Microsoft Exchange are from Microsoft, but OIT officials said both systems will be easily accessed on Mac as well as PC computers. The systems are also designed to be easily synced to Internet-capable mobile phones, including the iPhone and BlackBerry, providing on-the-go accessibility.

The new faculty-staff e-mail system, Microsoft Exchange, is the most widely supported e-mail platform available, said Bliss Bailey, executive director of OIT. He said the broad-based support allows it to support large e-mail inboxes better than Groupwise was able to, but employees will not lose their current e-mail addresses.

Microsoft Exchange will be hosted on campus and managed directly by OIT personnel.

TigerMail Live is the new student e-mail and is a system of Microsoft Live. Although hosted off campus, it can still be accessed at the original TigerMail webpage, and it allows students to keep their current e-mail addresses.

Brian Anderson of OIT user services said the new student e-mail system will have a 10 GB quota, which is almost 1,000 times larger than the original TigerMail capacity.

Groupwise has had the bigger struggle with handling the volume of e-mail that employees send and receive. Bailey, the OIT executive director, said the Microsoft Exchange program is designed to significantly ease that problem. Under Microsoft Exchange, faculty and staff will continue their access to AU Access and Blackboard in addition to normal e-mail services.

In addition to basic features, TigerMail Live includes calendaring, as well as 25 MB of SkyDrive, which allows students to store files online, and Spaces, a customizable webpage which can include a blog, pictures and videos. Microsoft Exchange is also set to have SkyDrive storage for faculty-staff, but will involve regulations due to employees housing university proprietary data within their files.

Each system will also use a Microsoft filtering service designed to prevent frequent spamming and each includes a junk mail folder.

Unlike other large e-mail systems, privacy still remains, Anderson said, adding, “Microsoft is not indexing or dredging your e-mail to customize ads like g-mail.”

Throughout the summer, groups of current students will be invited to make the switch to TigerMail Live, beginning with recent graduates, seniors and juniors.

This fall will complete the transition with sophomores and freshmen, and all students are scheduled to have TigerMail Live by February 2011.

Anderson said each student will be invited to a webpage and will click “yes” to move his or her account. Then the system will create the person’s new TigerMail Live account.

The transition of old messages and folders may take anywhere from 24 to 48 hours. Once a student agrees to switch his or her account, the old account will remain active for 14 days to allow time for transferring personal address books. After two weeks, the old account will be terminated.

Unlike the previous one-year termination for students, TigerMail Live will be available for life.

“You do have to graduate (to keep the account),” said Hix. “(But) it will help to keep you in the Auburn community.”

The migration for faculty and staff will not be as simple as having an opt-in button. OIT staff will work with college and departmental coordinators to help guide individual faculty and staff members in their units through the transition.

Ellyn Hix, director of OIT user services, said OIT is striving to make the migration go as smoothly as possible and will probably make the transition at night or on a weekend for employees’ convenience. But as of now there is no migration schedule set, she said.

Online go to www.auburn.edu/oit/account_info/tigermail_live/ for more information about the transition to TigerMail Live. Information for the transition to Microsoft Exchange will be posted in the near future.

— Sarah Phillips
What thrives on heavy metal but is not a music fan and is named for an Auburn prof? A bug offering clues on pollution, food chains

Business and political leaders often have the distinction of having buildings named for them — Samford Hall, Shelby Center, etc. — others lend their names to entire universities — Vanderbilt, Duke, etc.

But in the biological sciences, some prestigious naming opportunities are in Latin and come in much smaller packages through the discovery of previously unknown organisms.

That is the case with Melanotrichus boydi, a rare insect with a fondness for similarly rare plants — plants described as hyperaccumulators because they develop high concentrations of a metal, nickel, which at high levels is toxic to potential predators. The previously unknown insect with the ability to override this natural defense is named for Robert Boyd, a professor of plant ecology in Auburn’s College of Sciences and Mathematics.

Boyd has traveled to the natural habitat of these plants in California, South Africa and New Caledonia to collect insects that contain high levels of metal and have likely evolved to feed on these plants. One trip led to the discovery of the new species, Melanotrichus boydi, which figures prominently in continuing studies of the transfer of toxins between species.

Boyd and graduate students discovered the yellow-green plant bug while doing field work in California a few years ago. The insect features a high level of nickel in its tissues and is found only in the vicinity of a nickel-hyperaccumulator plant restricted to high-nickel “serpentine soils” in California.

The insect was featured on the cover of the special issue “Insect Adaptations to Heavy Metals” of the journal Insect Science in February. It was also included on the cover of an edited volume of scientific papers, “Soil and Biota of Serpentine: A World View,” published by the journal Northeastern Naturalist in 2009.

“Hyperaccumulating plants are important to the environment because they have the potential to remove nickel from the soil if they are planted in polluted areas,” Boyd said. “The plants can be harvested and burned to create an energy source or biomass fuel and the nickel in them can also be recovered.”

Boyd hypothesizes that these plants store metal in their tissues to defend themselves against herbivores and pathogens in what he and his co-investigators have called the elemental defense hypothesis. He is exploring the minimum levels of metals that can have defensive benefits for plants. One of his doctoral students, Dorothy Cheruiyot, is extending the elemental defense hypothesis by testing how metals may protect plants from herbivores at low, or less than hyperaccumulator, levels.

“By experimenting with several nickel hyperaccumulator species, my students and I found that nickel can protect plants against some herbivores and pathogens, but not others,” Boyd said. “Some herbivores that attack these plants have likely evolved to tolerate a high-nickel diet.”

By experimenting with insects like Melanotrichus boydi, Boyd says he and his graduate students hope to determine how the metal in the insects will affect predators that feed on them. Such studies extend to the effects the metal has on other organisms as it moves up through the food chain.

“Studies of the distribution of nickel within bodies of high-nickel insects, and the physiological adaptations that allow them to consume high-nickel food, may illustrate new mechanisms of metal tolerance,” Boyd explained.

He added, “These insects may have impacts on food webs and species interactions that can help us better understand the serpentine ecosystems in which they live.”
EcoDogs

Dogs locating endangered species for conservationists

These dogs seek out animals in the woods, but they aren’t your typical hunting dogs. They have been trained to find endangered species so Auburn University researchers can document the location and number of the rare animals.

The question is, how do you put dogs on the trail of unusual, elusive critters that few humans have seen? The dogs aren’t looking for animals per se, but are trained to find where the animals have been, that is, by finding their excrement, or scat.

Todd Steury, an assistant professor of wildlife ecology in the School of Forestry and Wildlife Sciences, has started a program, EcoDogs: Detection Dogs for Ecological Research, to study “greatest conservation need” species.

“Alabama is home to 117 endangered species, which is third in the United States behind Hawaii and California, and numerous other species are at risk,” Steury said. “But little is known about these species, including where they are located, the habitats they occupy, and how many individuals of a species exist.”

Sophie, a 15-month-old black Labrador retriever, is trained to find scat from eastern spotted skunks, while Bishop, a 3-year-old black Labrador retriever, is trained to find scat from striped skunks. Both can also detect fecal matter from black bears. The program recently added five new dogs as well.

“We are especially interested in the eastern spotted skunk,” Steury said. “It is very small like a squirrel and is very susceptible to predators. Over the past two years, we have taken more than 600,000 photos with game cameras and we only got two photos of eastern spotted skunks.”

The goal, he said, is to find populations large enough to study with additional techniques such as trapping and attaching radio transmitter collars. “We want to find out what is reducing the populations,” he said. “Is it disease? Is it predators? We need to know the reproduction rates. We then can address issues that cause animals to become endangered.”

EcoDogs, which began a year ago, is the only program of its kind in the Southeast and is one of only four in the United States. Two are located in Washington state and one in Montana. EcoDogs is a collaborative project between Auburn’s School of Forestry and Wildlife Sciences and the College of Veterinary Medicine’s Animal Health Program, which includes the Canine Detection and Research Institute and the Sports Medicine Program.

“The dogs are housed at the veterinary college where we provide care and prepare them for this type of work,” said Rob Gillette, director of the Animal Health Program.

“Our first priority is the dogs’ care and making sure they are in proper condition. The dogs love doing this,” he said.

The college has handlers who train the dogs and accompany Steury and his graduate students to the research sites. This summer they will use the dogs to study black bears near Apalachicola, Fla., to learn more about human and bear interaction near new and proposed developments. Steury also wants to count black bears in the Mobile River Basin near Mobile.

“Each animal’s scat contains DNA specific to that animal,” he said. “By collecting scat samples, we can get a population count for a certain location. This will allow us to formulate an estimate for a much larger area.”

The dogs, always teamed with a handler, can work up to four hours a day covering 12 miles in a zigzag pattern around the edges of a triangular area. Dogs usually detect the scat within 15 meters, sometimes up to 100 meters, and will sit down when they find the appropriate scent. A GPS collar allows trainers to keep up with the dog’s location and it records the dog’s path which can be viewed later on a computer.

“If we see sudden or irregular paths on the GPS, this can indicate where the dog detected the scent of the scat,” Steury said.

He says the training time takes three to six weeks for the first scent and then a few days for additional scents. Samples of scat are collected from zoos and other wildlife organizations.

“We try to obtain scat from 10 to 20 individual animals of the species we want to study,” he said. “The dogs are exposed to those samples and rewarded for finding them. We also expose them to scat from other animals, such as deer, but we don’t reward them for finding those droppings. This teaches the dogs to ignore those scents.”

Auburn researchers are also interested in finding scat from endangered long-tailed weasels in Alabama.

“We have been able to take only one photo of a long-tailed weasel in our game camera surveys, and there have been only eight reported road kills in Alabama since 1988,” Steury said. “Getting samples of its scat is a problem because only one zoo in the U.S., in North Carolina, has a long-tailed weasel in captivity. We will try to use scat from several kinds of weasel so we can create a ‘weasel dog’ to detect scat from any kind of weasel. Hopefully this will help lead us to a long-tailed weasel.”

— Charles Martin

Camp gives Loachapoka students college exposure

Loachapoka high school students will come to Auburn University June 21 for a one-week residential camp to see what living on a college campus is like while they learn how to prepare successfully for college admission.

The camp, coordinated by the College of Education’s Truman Pierce Institute and funded by University Outreach, is offered for the first time this summer.

“The goal,” said outreach coordinator Christiana Russell, “is to help these students begin to imagine themselves as capable of attending college and then give them the support and skills they need over the next several years to be successful in the college application process.”

The Office of University Writing is providing reflective journals for participating students to record important memories, impressions and thoughts throughout the week. At the end of the week, students will share their writing in an Open Mic Night.

“With the help of Chantel Acevedo, an assistant professor in the Creative Writing Program, we hope to show these students how writers use journals to capture their thinking and then move those thoughts into different kinds of writing,” Russell said.
Provost appoints committee to search for new dean for College of Architecture, Design and Construction

Provost Mary Ellen Mazey has appointed a search committee for the new dean of the College of Architecture, Design and Construction.

The committee will conduct the search this summer with assistance from an executive search firm. The panel’s schedule calls for finalists to be identified and invited to campus in the early fall.

Dan Bennett, dean of the College of Architecture, Design and Construction, recently announced his plans to retire at the end of the 2010 fall semester. The new dean will be appointed during the fall semester prior to Bennett’s retirement.

Bennett has served as dean of the college at Auburn since 2000, after spending 10 years as dean of the School of Architecture at the University of Arkansas.

“The decision to retire has been difficult because I have truly loved working for Auburn and for the College of Architecture, Design and Construction,” Bennett said. “However, after almost 20 years in the position of dean, both here and at the University of Arkansas, I am ready to slow down just a bit.”

The 10-member search committee is chaired by Richard Brinker, dean of the School of Forestry and Wildlife Sciences, who is also retiring.

Other members include faculty senate representatives Rod Barnett, associate professor and chair of the Landscape Architecture Program; Rich Britnell, professor in the Department of Industrial and Graphic Design; Kelly Bryant, associate professor in the Department of Industrial and Graphic Design; Richard Burt, professor and head of the McWhorter School of Building Science; Larry Crowley, associate professor in the Samuel Ginn College of Engineering; Magdalena Garmaz, associate professor in the School of Architecture; Carla Bell, staff representative and director of multicultural affairs for the CADC; Sarah McCall, student representative and vice president of the CADC Student Council; and Terry Johnson, alumni representative and president of the CADC Executive Board.

Researchers design educational uses for Apple iPads

Researchers in Auburn’s College of Education, along with Birmingham-based PUSH Product Design, are designing Apple iPad applications to improve the social and communications skills of young children with Autism Spectrum Disorder.

Scott Renner and Margaret Flores are working with 10 students between the ages of 4 and 14 diagnosed with Autism Spectrum Disorder. Combining outreach and research, the researchers will evaluate the children’s social and communication skills, teach them how to use the iPads and then observe and assess improvement of those skills in a classroom setting.

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