



Texas A&M Information Technology 2011 ANNUAL REPORT

CONNECTING

WITH OUR CUSTOMERS

Letter from the CIO

Today's information technology is such a routine and reliable part of university life that IT is often seen as a basic utility. Simultaneously, IT is viewed as a transformative force for advancing innovative thinking and a tool to help solve the world's most difficult problems.

Looking at the past year, we provided pre-eminent IT resources to meet both views – delivering daily, and often overlooked, services essential to achieving the university's mission, while providing state-of-the-art resources to support world-class research. In addition, we established exceptional solutions to support teaching and learning. We supplied value-added, cost-effective services to help faculty, staff and students succeed.

This report is dedicated to the hard-working professionals at Texas A&M IT, along with our partners at the university and throughout the A&M System. I encourage you to share your questions or comments with me and the members of our team as we continue to build an outstanding IT environment for our university.



A full-length portrait of Dr. Pierce Cantrell. He is a middle-aged man with light-colored hair, wearing a dark blue suit jacket, a white dress shirt, and a patterned blue and white tie. He is standing with his hands in his pockets against a plain white background.

Pierce E. Cantrell

Dr. Pierce Cantrell

*Vice President and Associate Provost for
Information Technology and Chief Information Officer
Texas A&M University*

Who We Are

Texas A&M Information Technology

The Office of the Vice President and Associate Provost for Information Technology and the departments of Texas A&M IT provide services and resources that help the faculty, students and staff of Texas A&M University use technologies to achieve excellence in teaching, research, learning and administrative pursuits.

Computing & Information Services

Computing & Information Services (CIS) provides core IT infrastructure resources and facilities that support the campus and departments within Texas A&M IT. CIS operates central campus servers that house mission-critical data and services, including email, Internet and network access, campus wireless, websites, data center operations and administrative and academic systems. CIS provides campus computer labs, 24-hour assistance through Help Desk Central, hardware and software support, custom application development, discounted software for departments and individuals, as well as the university's Supercomputing Facility.

Educational Broadcast Services

Educational Broadcast Services (EBS) is comprised of KAMU-TV/DT, KAMU-FM and TTVN. They offer a unique synergy of technology and expertise for wide area networking, interactive communications, public broadcasting and audio/video production that broaden the range of services available to the university community. KAMU provides public radio and television broadcasting services to Bryan/College Station and surrounding areas.

TTVN is the wide area data and interactive communications network for The Texas A&M University System, which provides enterprise-level high-speed data networking services to each of the 10 A&M System university campuses, the Health Science Center and the seven research and service agencies. TTVN also provides interactive videoconferences with any site worldwide, Centra webconferences and live and archived Windows Media streaming audio and video webcasts.

Enterprise Information Systems

Enterprise Information Systems (EIS) is responsible for the implementation and maintenance of mission-critical, enterprise-wide information systems at Texas A&M. Compass, the web-based student information system, has been implemented at the College Station, Galveston and Qatar campuses. EIS also is responsible for Howdy, a comprehensive web portal, which serves as the "front door" to Compass and connects students, applicants, faculty, staff, former students and parents/guardians to web-based services at Texas A&M.

Who We Are (continued)

Instructional Media Services

Instructional Media Services (IMS) provides and supports multimedia equipment and technology tools that enhance and improve the quality of classroom instruction. IMS maintains multimedia/computing equipment in technology-enhanced Smart classrooms across campus. These automated systems allow instructors to use one interface to easily control classroom equipment including the data projector, screen, computer, VCR/DVD player and optional equipment such as a Smart Sympodium or document camera. IMS personnel also deliver and set up equipment for classes or other functions in rooms without permanent equipment.

Instructional Technology Services

Instructional Technology Services (ITS) fosters effective use of technology in teaching and learning. ITS maintains, administers and develops university-wide systems and services to strengthen eLearning, including supporting Blackboard Vista, the university's enterprise-level learning management system. ITS provides professional development opportunities and empowers instructors to use best practices in higher education to enhance student learning through technology. They offer workshops, individual training, course design consultation, online resources and equipment for instructors to complement various learning styles and foster effective course design.

Networking & Information Security

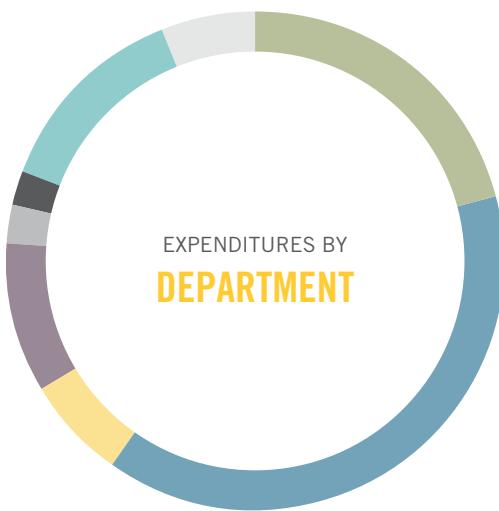
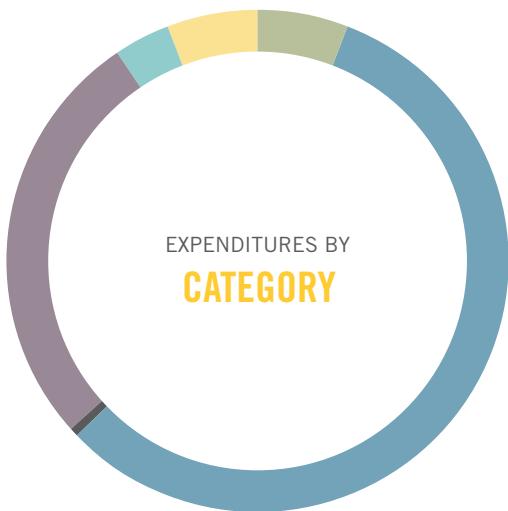
Networking and Information Security (NIS) maintains and supports the campus and community network backbone and provides network connections. They are responsible for Internet connectivity, campus wireless service and remote office services. NIS is in charge of the information security program that maintains and enhances the overall security posture of the university. Their responsibilities include campus firewall maintenance, incident response and investigation, firewall and sensor configuration and providing information and notification on viruses, attacks and vulnerabilities. NIS initiates and applies IT policies and procedures, as well as develops and administers information security awareness training for students.

Telecommunications

Telecommunications provides fast, reliable and cost-effective telecommunications services. They offer voice services to all A&M System offices in College Station and other offices in Texas and international locations, as well as all network service contracts for all A&M System office locations. They support security and surveillance systems on campus, as well as manage the university's two-way radio systems. Telecommunications also manages the Emergency Alert System, a component of the university's Code Maroon system, which provides the ability to rapidly distribute emergency information to the campus.

Budget Summary

FOR FISCAL YEAR 2011 – TOTAL \$72 MILLION



	\$4.2 M	CAPITAL EQUIPMENT
	\$41 M	OPERATIONS & MAINTENANCE
	\$361 K	TRAVEL
	\$19.5 M	SALARIES
	\$2.7 M	WAGES
	\$4 M	FRINGE

	\$15 M	VICE PRESIDENT AND ASSOCIATE PROVOST FOR INFORMATION TECHNOLOGY
	\$27.9 M	COMPUTING & INFORMATION SERVICES AND NETWORKING & INFORMATION SECURITY
	\$4.8 M	EDUCATIONAL BROADCAST SERVICES
	\$6.9 M	ENTERPRISE INFORMATION SYSTEMS
	\$1.8 M	INSTRUCTIONAL MEDIA SERVICES
	\$1.7 M	INSTRUCTIONAL TECHNOLOGY SERVICES
	\$9.4 M	TELECOMMUNICATIONS
	\$4.2 M	CAPITAL EQUIPMENT

IT Infrastructure

Data center upgrade to keep IT cool

The campus data centers host many mission-critical systems including university email, eLearning, the Howdy web portal and Budget/Payroll/Personnel (BPP). These systems and many others in the data centers are vital to university functions, so ensuring they stay up and running without interruptions is an important priority.

A major upgrade to its critical cooling capacity will make the main campus data center more robust and less prone to failures. Adding to its existing chilled water system, the data center will have fully redundant cooling capabilities with installation of a new high-capacity refrigerant system capable of using both chilled water and refrigerant.

No scheduled outages are planned for this important upgrade, with the project team working closely with contractors to protect equipment and limit disruptions. The cooling renovation project is anticipated to be completed in June 2012. Read more at the [Main Campus Data Center Cooling Renovation Project page](#).



WHAT'S IN THE DATA CENTER?

MY EMAIL

Every university email message goes through the mail relays in the data centers.



MY GRADES

The Howdy web portal provides access to university records in the Compass student information system.



MY COURSES

eLearning and other teaching resources enhance student learning.



MY INTERNET ACCESS

Network routers enable access to the Internet for the entire campus.



MY DEPARTMENT ACCOUNTS

Financial Accounting Management Information System (FAMIS) resides on a mainframe in one of the data centers.

THE DATA CENTER HOUSES INFORMATION FOR

**TEXAS A&M
AND THE
A&M SYSTEM**



MY PAYCHECK

Budget/Payroll/Personnel (BPP) resides on a mainframe in one of the data centers.

MY RESEARCH

The supercomputers and many departments' data repositories are located in the data centers.



MY KEYS TO TEXAS A&M

Your NetID and UIN are usernames for logging in to many university resources.



MY STUDENT FINANCES

The Howdy web portal lets students view financial aid information, pay tuition and access related services.



MY TRANSCRIPT

Former students order transcripts through the Howdy web portal.

IT Infrastructure

Distributed Antenna System expansion improves cellular service

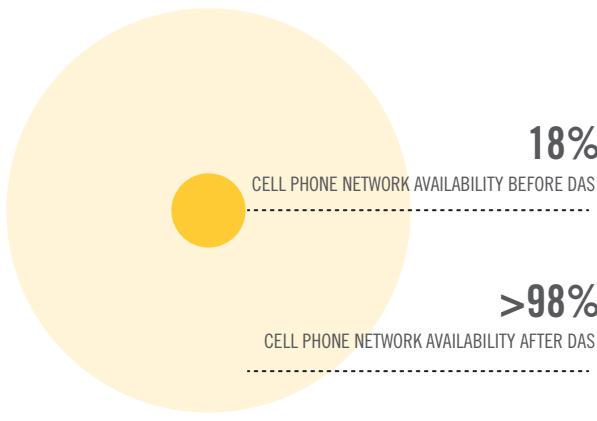
With the growing use of smartphones and tablets, Texas A&M's challenge was two-fold: accommodate the campus' increasing requirements for bandwidth and provide wireless coverage for sellout crowds at its large sports venues, such as the 90,000+-seat Kyle Field.

Texas A&M IT's answer is the Distributed Antenna System (DAS), an innovative wireless technology that augments mobile service throughout the campus, especially in high cell usage areas. Instead of installing large cell towers, DAS uses strategically placed, low-profile antennas connected via fiber to a central location. Each DAS site is shared by multiple wireless operators, substantially reducing the number of sites needed. DAS fills in coverage gaps and dead spots, and by dividing a macrocell site into smaller parts, it adds capacity to operators' networks. DAS can be installed to meet current needs and scaled up as demand grows.



With DAS, bandwidth can be reallocated to handle massive increases in demand by thousands of smartphone-toting fans at sporting events. Today's fans want to email, text, tweet, update their Facebook page or even watch another game on their smartphones while attending the game in person. AT&T and Verizon Wireless used Texas A&M's DAS to expand their mobile broadband coverage at Kyle Field.

Seventy DAS antennas were added to Kyle Field in FY 2011, and this new capacity is expected to improve call reliability and enable more consistent network access during games. AT&T also placed antennas in Reed Arena, the site of Texas A&M's basketball games and commencement ceremonies, and will deploy DAS in Olsen Field in advance of the 2012 baseball season.



THREE VENUES:



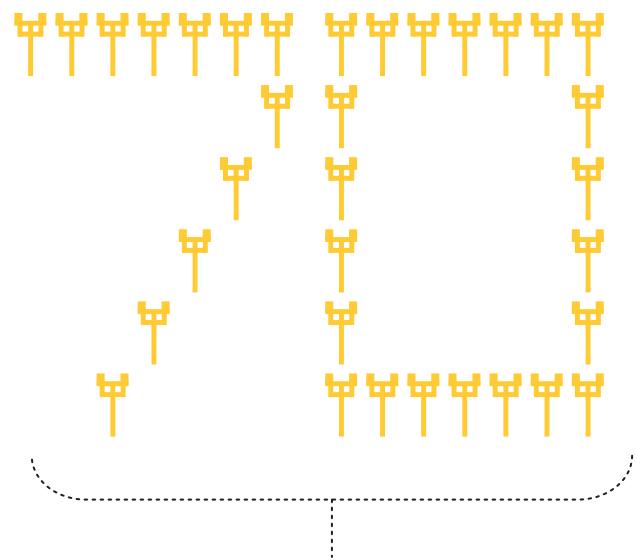
KYLE FIELD



REED ARENA



OLSEN FIELD



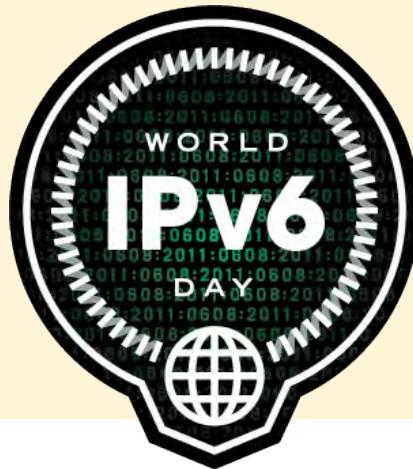
The number of DAS antennas added to Kyle Field in FY 2011

IT Infrastructure

IPv6 day marks preparations for new internet protocol

Texas A&M IT participated in a worldwide test of Internet Protocol version 6 (IPv6) on June 8, 2011, and worked toward campus deployment by making the university's main website, www.tamu.edu, and the TTVN enterprise network infrastructure accessible over IPv6.

IPv6 is the successor to the present Internet address system, which provides IP addresses for all devices connected to the Internet. Time is running out for the current system, IPv4, which is close to using up its 4 billion possible addresses. IPv6, an exponentially larger system with 2^{128} addresses, was created by the Internet Engineering Taskforce (www.ietf.org) to resolve this problem.



Doing our part

Re-addressing the campus network and updating hardware and software to support new addresses will be a large undertaking. To support this transition, Texas A&M IT now purchases only IPv6-compatible products, such as the equipment recently acquired to enhance the campus firewall.

For more information about the migration to IPv6, watch [The Last IP Address – One Year Later](#) by Richard Jimmerson, Chief Technology Officer, American Registry of Internet Numbers (ARIN) at the 2011 TTVN Annual Conference, or visit www.worldipv6day.org.

HOW MANY MORE IP ADDRESSES WILL THERE BE WITH IPV6?

IF EVERY 1 IP ADDRESS = 1 SQUARE METER:



IPV4:

APPROXIMATELY THE SIZE OF

RHODE ISLAND



IPV6:

APPROXIMATELY THE SIZE OF

6.7×10^{23} EARTHS!

IT Infrastructure

Self-Service Password Reset made simpler, more secure

Changing a forgotten NetID password became easier and more secure through a redesigned process. The Self-Service Password Reset application empowers users to change their own password without calling Help Desk Central. Users provide a non-TAMU email address or mobile phone number in advance, where a temporary link is sent if they forget their password.

**FORGOTTEN
PASSWORD?**

NO PROBLEM!



With so much personal information online, answers to questions used to verify identity during over-the-phone password resets could be easy to obtain. Eliminating potential security risks posed by the reset process became a necessity. In addition, dealing with high numbers of password reset phone calls became increasingly burdensome. In FY 2011, answering 57,811 password reset calls, or 44 percent of all calls to Help Desk Central, consumed 2,100 work-hours or 263 work-days.* The streamlined process should diminish this work load, providing significant cost savings. All users will be informed about setting up Self-Service Password Reset with password expiration notices sent throughout FY 2012. Read more at the [Texas A&M IT](#) website.

HELP DESK HOURS ASSOCIATED WITH PASSWORD RESET

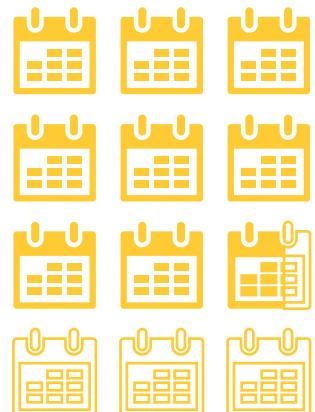
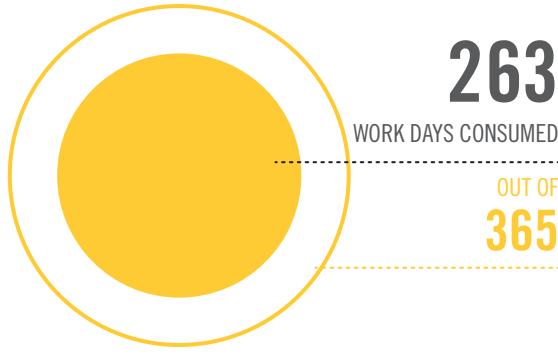
44%

57,811

TOTAL NUMBER OF PASSWORD RESET CALLS

131,931

TOTAL NUMBER OF HELP DESK CALLS



THAT'S ALMOST 3/4 OF A YEAR!

Additional 2011 Accomplishments

Internet backbone upgraded to 20 Gbps



To support the growing demand for Internet bandwidth, Texas A&M and the University of Texas upgraded the shared redundant connections to the Internet from 10 gigabit per second to 20 gigabit per second. By working with the University of Texas on this project Texas A&M can have a redundant high-speed connection to the Internet at a significant cost savings.

Network resilience improvement project begins

In the event of an infrastructure failure from a fiber cut or loss of power or cooling, the campus computer network must be able to support increasing numbers of network-dependent, mission-critical devices. Because buildings are linked through hubs, several buildings could lose connectivity if a hub goes down. New connections will allow traffic to be diverted to the next available hub, enabling downstream buildings to stay connected if a hub goes down. The network resiliency project will install generators at key network hubs and dual fiber optic connections to each major building.

WiMAX project to bring wider area wireless access

WiMAX technology is being deployed to provide wireless in areas on campus not covered by Wi-Fi. Devices on WiMAX will be able to connect to the campus network within the firewall using a simple USB device.

Texas Pipes website highlights Texas A&M's broadband network project



Informing the public of Texas A&M University's broadband network project is the focus of texaspipes.tamu.edu. The new website features at-a-glance progress indicators, a map of the proposed network and monthly reports. The Texas Pipes project, funded by a \$6.6 million [Broadband Technology Opportunities Program](#) grant, will build a fiber optic broadband network to bring state-of-the-art communications capacities to all 11 universities of The Texas A&M University System, the Texas A&M Health Science Center, and over 30 schools and community-serving institutions in 14 cities across Texas.

Additional 2011 Accomplishments

Texas A&M wireless expansion continues



Seven more residence halls were outfitted with wireless capabilities, adding to existing wired Ethernet resources in these buildings. Students living in 20 dorms have the option of using the wired connection or TAMULink wireless. All residence halls are scheduled to have full wireless in the next two years through funding provided by the Department of Residence Life. The campus has 3,306 TAMULink wireless access points (1,545 b/g compliant and 1,761 b/g/n compliant). View a map of [TAMULink wireless locations](#).

Buildings added to campus wired network

Several buildings were added to the campus wired network during FY 2011: University Apartments Buildings M, N, P and Q, University Apartments Activity Building, Emerging Technologies Building, Agriculture and Life Sciences Building, AgriLife Visitor's Center, Penberthy Intramural Sports Center and Texas Engineering Experiment Station leased space at Valley Park Center II.

NAT implemented in residence halls

To increase flexibility in assigning IP addresses, Texas A&M IT implemented network address translation (NAT) on the residence network. NAT allows "private" IP addresses for devices on the network. Students in residence halls still receive high-speed Internet, while IP addresses become freed for other purposes.

Improved Central Authentication Service meets greater demands



The redesigned Central Authentication Service, the enterprise-wide single sign-on service, was improved to meet increasing demand. The overhaul improved service reliability and stability, making access less prone to lag time. Central authentication eliminates the need for applications to maintain user accounts, while users only need to remember their NetID and password to log in to most university services. Read more at the [Infrastructure Services](#) website.

Additional 2011 Accomplishments

Directory Edit application adds new settings

Redesign began of the Directory Edit application to improve usability and incorporate new services. The application allows individuals to make changes to their email and directory information. Options added include setting up Self-Service Password Reset and changing settings for the Campus General Interest Email List, which is used to disseminate non-official university business messages.

Bulkmail service upgrade supports branded messages

L-Soft Maestro software was implemented to manage the university's Bulkmail service, allowing delivery of targeted, personalized and branded messages. Principal users, including the Office of the President, can send visually appealing email messages with images, fonts and other formatting that support the university's overall brand. The software also provides a self-service interface for approved senders.

TAMUDirect website redesign improves user experience



The TAMUDirect mailing list service was redesigned to provide a better user experience and faster responses when managing large numbers of lists. TAMUDirect provides a convenient way for authorized individuals to send email to specific groups of recipients within the Texas A&M community.

Shibboleth allows easier access to federal research portals

Texas A&M's research community can use university credentials to access informational services and grant portfolios at the National Institutes of Health's Federation Gateway and National Science Foundation's Research.gov. Access to these services and others occurs via Shibboleth, an identity management software that simplifies sharing of online resources between affiliated institutions. Single sign-on with university credentials provides greater convenience and added account security, while reducing administrative burdens of maintaining user IDs and passwords. Texas A&M is a member of the [InCommon Federation](#), a group of more than 300 higher education, commercial and government entities focused on creating a common framework to share protected online research and education resources.

Additional 2011 Accomplishments

Streamlined access to certificate service boosts security

The A&M System began participating in the InCommon Certificate Service, which provides the U.S. higher education community with unlimited digital security certificates at one low annual fee. Certificates secure communications to and from an Internet host and allow systems to verify the host's identity. An institution can acquire unlimited certificates for all of its domains, including those hosted for professional societies, athletics or other campus-based organizations. For Texas A&M, the service is funded by the Office of the Vice President and Associate Provost for Information Technology. Support portals were developed that allow participants to request certificates. Read more at cert.tamu.edu.

InCommon Silver Assurance certification process begins

Texas A&M's Identity Assurance program began the process of attaining InCommon Silver Assurance certification. This higher level identity management certification will allow collaboration with entities for additional online services, such as financial aid, federal research grant programs and eSignatures. The process requires developing policies, procedures and services that meet the requirements for certification, which must be ready for certification audits slated for January 2012.

Teaching & Learning IT Support

New tools advance instructional technology support

Improving access to quality instructional technology support was the goal of implementing ITS Help, ITS Docs and TeamViewer remote assistance.

ITS Help, the customer service system powered by Numara FootPrints, facilitates technical support for the systems, software and devices supported by Texas A&M IT's Instructional Technology Services (ITS). Through ITS Help, users can enter a help request, view its status, add relevant notes or request a one-on-one appointment with a consultant. Users are kept informed via email updates as support requests are processed. The system has enhanced request tracking capabilities, which provides a baseline for improving service. With ITS Help, response times have decreased to typically within two to four hours after receiving a request during normal business hours.



IT Docs & TeamViewer: two ways to get help fast

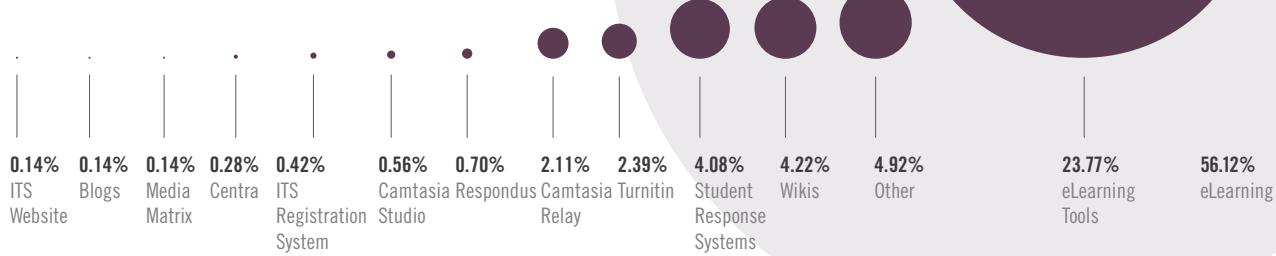
Instructional technology help documents were revised and restructured into **ITS Docs**, a comprehensive and frequently updated wiki for self-serve help resources. The site provides how-to guides, web-based orientation modules for self-paced learning, and other support and training material.

The **TeamViewer** tool was added to provide remote support. It enables an ITS staff member to view a customer's computer desktop and guide them through help steps while providing assistance over the phone.

ITS helps instructors deliver the high-impact courses and learning experiences needed to meet the university's educational mission. Through easily accessible support and no-cost, hands-on training, instructors gain technical proficiency using proven teaching tools.

Tracking requests with new tool

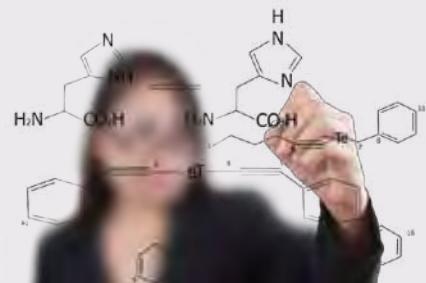
Below is a breakdown of the requests for assistance received for July and August organized by the systems and tools we support. In July, there were 168 requests for assistance; in August, that number increased to 545.



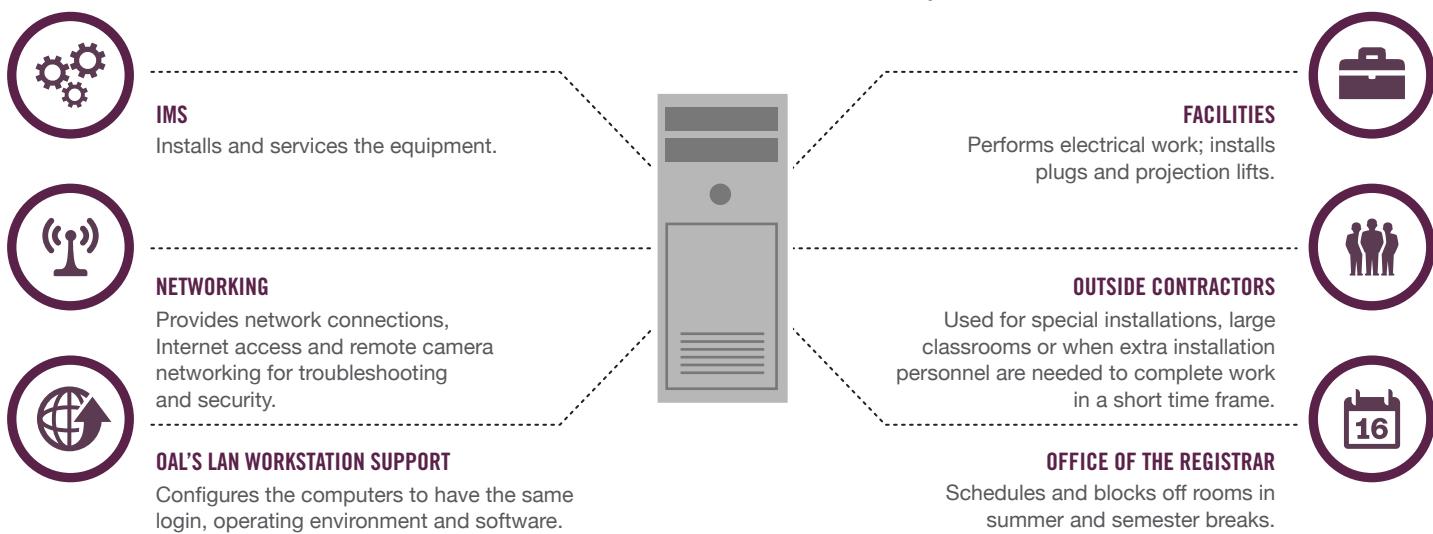
Teaching & Learning IT Support

Classroom IT support puts the focus on teaching

User-friendly technologies installed in classrooms let faculty concentrate on teaching instead of operating complex equipment. Simple options on the computer monitor allow users to turn on the projector, lower the screen, dim lights, control speaker volume and perform other tasks in classrooms with automated systems. These systems also allow technical support staff to remotely control and troubleshoot classroom equipment.



HOW MANY AGGIES DOES IT TAKE TO AUTOMATE A CLASSROOM?

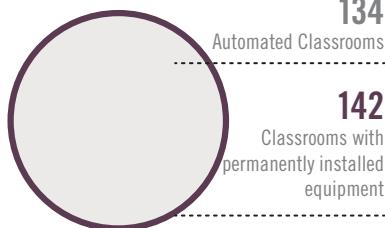


Meeting Demands for Classroom Equipment

During FY 2011, 26 classrooms were upgraded with automated systems. In addition, seven classrooms, which had no installed equipment, received installations to become fully automated. Of the 258 Registrar-controlled classrooms, 142 rooms (55 percent) now have permanently installed equipment supported by IMS, and 134 of these rooms are automated. Of the remaining 116 Registrar-controlled classrooms, 93 rooms have non-standardized equipment supported by colleges or departments. Only 13 rooms have no equipment.

258 ALL REGISTRAR-CONTROLLED CLASSROOMS

93
Classrooms with
non-standardized
equipment*



About Instructional Media Services

Upgrading and maintaining classroom equipment is the job of Texas A&M IT's Instructional Media Services (IMS). Classroom renovation is limited to weekends, holidays and semester breaks. IMS plans and coordinates with multiple departments to maximize work that can be achieved in the allotted times. As more classrooms are upgraded, faculty benefit with familiar, standardized equipment and common NetID logins. All classroom computers supported by IMS provide access to faculty members' Open Access Lab network storage space and roaming profile, which saves customized settings such as bookmarks and desktop background.

*Some classrooms have equipment supported by colleges or departments.

Teaching & Learning IT Support

Students use computing labs without leaving home

“ February [2011] begins on a frigid note.

College Station...averaged almost 20 degrees colder than the 30 year climate normal,” said the National Weather Service’s [public information statement](#). In Dallas, the bitter winter storm put the brakes on Super Bowl festivities with ice-covered roads and flight delays. Many Texas A&M students coped with the super-cold weather by logging in remotely to the Virtual Open Access Lab. The service, which provides access to campus computer labs from anywhere, saw an uptick in usage during that memorable week. These students continued their classwork by retrieving files on secure network space and using many of the lab’s 148 software applications. Students can use these programs without having to purchase them, lessening their educational financial burden.



On campus, the Open Access Labs (OAL) provide computers (PCs and Macs), software, scanners and printers in six fully staffed labs and ten supported locations, including the University Libraries, open up to 24 hours per day. A new computer classroom opened in the Agriculture and Life Sciences building. Throughout FY 2011, 64,841 unique users logged in 5,896,272 times to OAL computers!

Extending computer life

Automating the OAL account initiation process made life simpler for new students and incoming faculty who no longer need to activate their accounts. An estimated \$97,000 per year will be saved with OAL computers being replaced every four years instead of three years. Computers leaving the labs continue to be used by other departments for academic instruction in department-controlled computer labs.

Read more at oal.tamu.edu.

64,841

TOTAL NUMBER OF
UNIQUE OPEN ACCESS LAB USERS IN FY 2011

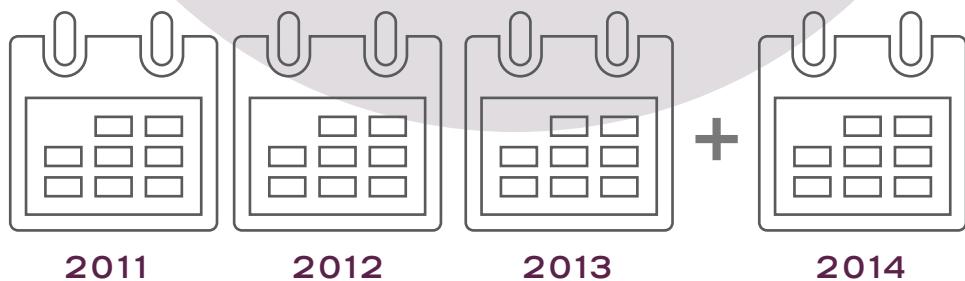
5,896,272

TOTAL NUMBER OF OPEN ACCESS LAB LOGINS IN FY 2011

ADDING ONE YEAR

TO THE OAL COMPUTER LIFE CYCLE

SAVES
\$97,000
PER YEAR



Teaching & Learning IT Support

Information Security Awareness Month's mystery theme engages campus

Monsters and villains invaded Aggieland during Information Security Awareness Month on October 2010.

Mystery.tamu.edu hosted original film noir videos featuring hard-boiled detective Rev Rudder pursuing an identity thieving werewolf, account-phishing vampire, copyright-infringing pirate and virus-infected zombie. Over 10,700 students, staff and faculty visited the site to watch the mystery videos, take weekly security-related quizzes and enter for prize drawings. The month-long awareness campaign received a best in category award for a general service campaign from the Special Interest Group on University and College Computing Services ([SIGUCCS](#)).



The “Don’t Be a Victim” videos and information security campaign were recognized for excellence in communications by the Special Interest Group on University and College Computing Services.

1 MONTH × 5 VIDEOS

10,700
VIEWS

About Information Security Awareness

Information security awareness supports protecting computers and electronic information from hacking, viruses and other misuse. Knowledge of information security also protects personal privacy and accounts. Other methods to communicate security awareness included annual online training (mandatory for all students and employees) and PossibiliTies, the IT newsletter for faculty and staff published every semester. Newsletters featured articles about the real villains of cybercrime and how to protect data on mobile devices. Read the [PossibiliTies newsletters](#).



PossibiliTies Newsletter

Additional 2011 Accomplishments

Grant programs improve instructional and faculty computing

Grant programs administered by Texas A&M IT are used to fund proposals that positively impact the instructional computing environment. In FY 2011, \$200,000 was distributed through the Computer Access/Instructional Technology Fees (CA/ITF) Competitive Grant program. \$193,000 was distributed through the Classroom Instructional Technology Grant program. The Faculty Workstation Program for the College Station and Galveston campuses distributed \$914,000 (\$685,500 central and \$228,500 matching funds). Read more at [Grant Programs](#) page.

Committee meets to select new learning management system

A selection committee met for nine months to help choose the university's next learning management system. The current Blackboard Vista system is scheduled to reach end-of-life in 2013. The committee included representatives from each college, as well as an undergraduate and a graduate student member. Facilitated by Texas A&M IT's Instructional Technology Services, the committee reviewed both commercial and open-source systems and submitted their recommendations in August 2011. Read more at the [eLearning System Review and Selection Process](#) page.

Centralized lecture capture arrives at Texas A&M

Instructional Technology Services partnered with Texas A&M's Internet Media Services to provide a streamlined way for instructors to record live lectures from their desktop and publish them for online streaming. The new service uses Camtasia Relay, a server-based system that records the lecture and processes the recordings to a variety of formats. The server outputs the multiple file formats for distribution to MediaMatrix, iTunes U or other content distribution channels. Camtasia Relay is scheduled to be installed on all Registrar-controlled classroom computers and Open Access Lab computers in fall 2011.

Complete Turnitin2 suite available to Texas A&M instructors



The Turnitin2 site license was updated to include PeerMark and Grade-Mark services, in addition to the existing plagiarism prevention service. PeerMark offers either instructor-assigned or anonymous peer review options for students to analyze and critique each others' papers. Grade-Mark provides paperless grading capabilities and mechanisms for giving feedback. These services will be available via eLearning or through Turnitin2's standalone web service beginning September 2011.

Teaching & Learning IT Support

Additional 2011 Accomplishments

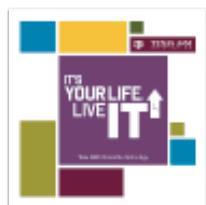
New online teacher certification program offered

The Professional Certification in Online Teaching is offered to faculty, teaching staff, instructional designers and distance learning support staff of Texas A&M College Station, Galveston and Qatar at no cost. The certification program helps participants develop online instructional skills. It teaches them how to create quality web-based courses and strengthens their knowledge of various online assessments. Read more at the [Professional Certification in Online Teaching](#) page.

Conferences showcase instructional technology knowledge

The Instructional Technology Showcase (fall 2010) and Teaching with Technology Conference (spring 2011) provided instructors with opportunities to learn from colleagues and share best practices for teaching with technology. Throughout the year, workshops, customized training sessions, user groups and newsletters provided instructional technology learning opportunities to meet faculty needs. Read more at the [Instructional Technology Services](#) website.

Incoming Aggies learn about IT at New Student Conferences



New Student Conference presentations to students and parents, online and printed material, and in-person assistance at service booths helped over 15,000 new Aggies become acquainted with IT services. Read the conference brochure, [It's Your Life, Live IT Up!](#)

Teaching & Learning IT Support

Additional 2011 Accomplishments

Texas A&M hosts southwest regional collegiate cyber defense competition



Student teams from 11 universities tested their abilities to defend computer networks against external threats at the three-day regional cyber defense competition hosted by Texas A&M. Pitted against a team of network security professionals acting as attackers, the student cyber defense warriors sharpened skills that are increasingly crucial to protecting national interests. The competition staff included employees from Networking & Information Security, the Academy for Advancing Telecommunications and Learning Technologies and the Department of Computer Science. This group planned the three-day event for around 130 attendees. This unique competition requires all of the tasks common to event planning and detailed network planning to create 11 identical networks and integrate them into the central network for scoring. Texas A&M took first place in the competition, earning a seat at the National Collegiate Cyber Defense Competition. Read more at the [National Collegiate Cyber Defense Competition](#) website.

Earth Day campaign recycles e-waste



Texas A&M IT partnered with the university's Environmental Issues Committee for the "Be an eHugger" campaign to encourage e-waste recycling. Students dropped off almost 80 pounds of used batteries, ink cartridges and other recyclable items at the Open Access Labs. Read [more about the campaign](#) and view the [Be an eHugger](#) video.

Short Courses boost technical knowledge

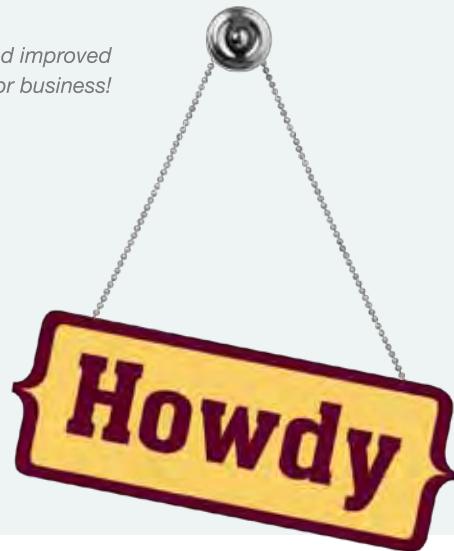
Help Desk Central's Short Courses provide basic-to-intermediate software classes that help students develop new technology skills. Students arrive at Texas A&M with a wide range of technology competence. Twenty-one no-charge short courses filled in the gaps, delivering fundamental knowledge to help students enhance classwork and compete for jobs. Visit the [Short Courses](#) site to read more.

Administrative Services & Support

Redesigned Howdy web portal more user-friendly

The Howdy web portal became easier to use with reorganized content and improved imagery and colors to highlight important information. Content within Howdy was prioritized and consolidated based on student feedback from focus groups and surveys. Key changes included a new My Finances tab separating billing services and financial aid. Portions of the My Record tab were rearranged into new categories such as My Schedule and My Information. Users also received the ability to print any Howdy screen in a viewer-friendly format.

*Howdy's new and improved
and open for business!*



HOWDY USERS PER YEAR
188,000

STUDENTS, APPLICANTS, FACULTY,
STAFF, PARENTS/GUARDIANS &
FORMER STUDENTS

The Howdy web portal is the front door to the Compass student information system, connecting 188,000 students, applicants, faculty, staff, parents/guardians and former students to their web-based services at Texas A&M. With a single login, users can access their university records or connect to important services such as eLearning and Texas A&M Email. Authorized parents and guardians can view their student's academic, financial aid and tax information, while former students can access their records and order transcripts.

My Records and My Finances, once combined, are now separate to help students access the information they need more quickly and easily.

MY RECORDS

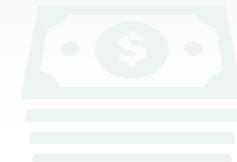
GRADUATION
SCHEDULE
REGISTRATION
GRADES & TRANSCRIPTS

MY INFORMATION
DEGREE EVALUATION
ACADEMIC RESOURCES
STUDENT RULES



MY FINANCES

TUITION & FEES
REFUNDS
INSTITUTIONAL LOANS
SCHOLARSHIPS & FINANCIAL AID
TAX FORMS
DEGREE EVALUATION



Administrative Services & Support

New tools and training improve project management practices

The Project Management Office (PMO) is the [go-to resource](#) to help A&M System members successfully implement IT projects. Through project management methodologies, departments can assess and execute mission-critical projects without overcommitting resources, ensuring projects are completed on time and on budget.



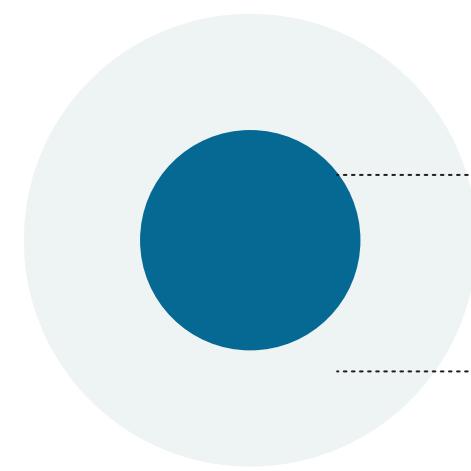
PROJECT MANAGEMENT HELPS

**SIDELINE the
SCOPE CREEPS!**

PowerSteering

Texas A&M recently purchased the PowerSteering project portfolio management tool. This system will be available for senior managers and their teams to manage IT projects and to comply with reporting and monitoring requirements. The PMO completed a pilot implementation with IT departments and groups in the College of Veterinary Medicine & Biomedical Sciences, Division of Student Affairs, Integrated Ocean Drilling Program and Computing & Information Services. A new project management standard administrative procedure, anticipated to be released in FY 2012, will define project management requirements for major IT projects.

PROJECT MANAGEMENT TRAINING BY THE NUMBERS



\$55,000

COST OF TEXAS A&M
PROJECT MANAGEMENT TRAINING

\$113,000

COST OF COMPARATIVE
OFF-SITE PROJECT MANAGEMENT TRAINING

Project management training

The PMO-provided training, including a Project Management Professional (PMP) exam preparation course, and began offering a Texas A&M Project Management Certificate upon successful completion of a series of classes. During FY 2011, 73 people from 12 departments attended PMO-sponsored training at a total cost of \$55,000. This onsite training saved \$58,000 (approximately 105 percent) of the cost of comparable off-site training. Twelve people attended PMO-sponsored PMP certification preparation training and six went on to earn their PMP credential. This represents a 300 percent increase in the number of known PMP-certified IT professionals at the university (from two to eight). Read more about the [PMO](#).

PMP CERTIFICATION NUMBERS



- ATTENDED PMP CERTIFICATION PREPARATION TRAINING
- WENT ON TO EARN PMP CERTIFICATION

73 PEOPLE, 12 DEPTS

105%
SAVINGS

THROUGH ON-SITE TRAINING

“ Project management is a way to realize goals, solve problems and demonstrate accountability. The stakes are even higher in these financially difficult times, when higher education must make hard choices about how resources are spent.”

Dr. Pierce Cantrell, Vice President & Associate Provost for Information Technology

Administrative Services & Support

Filex enables secure file distribution

With the new Filex system, Texas A&M faculty, staff and students can easily encrypt and safely send confidential or sensitive files. While Texas A&M requires encryption when sending confidential information electronically, many people do not know how to do this. With Filex, the user uploads a file and selects a one-click encryption option on the web-based interface. Recipients receive an emailed link to retrieve the file, and use the encryption key provided by the sender to view the file's contents.



Package large files &
send securely with Filex.

Bypass email attachments

Filex also provides an easy and effective means of transferring files too large to send as an email attachment – 2 GB or up to 5 GB with some web browsers. Users can even send to off-campus email addresses and customize permissions so recipients can upload files to the user's Filex folder.

Filex's simplicity and ease of use has encouraged its adoption by employees who handle sensitive information on a routine basis. At Texas A&M's Division of Finance, Filex is used to safely transfer large files used for monthly billing from a vendor, Bryan Texas Utilities, to Finance's accountants. Finance's IT staff recommended using Filex to all division employees to help ensure information security.

HOW FILEX WORKS



1.....

UPLOAD

Upload files to a
Filex folder.



2.....

ADD

Add recipient email
addresses.



3.....

SECURE

Send information securely
using the encryption
feature.

Administrative Services & Support

Help Desk Central answers the call

With new after-hours support for Tarleton State University, Help Desk Central provides assistance to even more people. Calls to Tarleton's Help Desk are forwarded to Help Desk Central after 5:00 p.m. on weekdays and all day on weekends. Although areas of assistance offered are currently limited, callers now hear a friendly voice instead of an automated message whenever a technical problem arises.



Help Desk Central is the main point of contact for IT support to the university's students, faculty and staff. Technicians are available to answer questions 24 hours a day, 365 days a year. They provide help ranging from everyday problems such as resetting a forgotten password to specialized assistance for campus IT professionals. In FY 2011, Help Desk Central responded via email, phone or in person to 180,879 requests for assistance, a 16 percent increase from FY 2010.

“I am so very thankful for the very wonderful technical support I received from Help Desk Central. Thank you for leading the way and making our information technology support one of the best!"

Brenda Takahashi, Help Desk Customer



180,879
CUSTOMERS SERVED in 2011
151,938
CUSTOMERS SERVED in 2010



Help Desk Repair

Help Desk Repair lends a hand for personally owned computers, offering virus and spyware removal, operating system installation and data recovery services. After a fire at a College Station condominium complex, a Texas A&M student brought a severely charred computer to Help Desk Repair to see if any files could be recovered. Although this was one of the worst cases the Repair team had seen, all of the data was recovered. [Read more.](#)



HELP REQUEST BY THE NUMBERS

Administrative Services & Support

Additional 2011 Accomplishments

Online Credit by Exam streamlines a time-consuming process

Through the new online Credit by Exam channel in the Howdy web portal, students who took tests such as AP, CLEP and SAT II can view and accept credit applied to their record. Over 2,000 students used the online system to accept more than 8,000 credit-by-exam courses. Previously, students had to complete a form in person at the Measurement and Research Services office (MARS). The new service not only provides convenience to students, it saves resources by reducing paper forms and lessening the workload of the MARS staff.

Transfer equivalency checker assists applicants and current students

Texas A&M IT assisted the Office of Admissions in creating the Transfer Course Equivalency website, which contains a searchable database of course equivalencies. Current and prospective students can search by Sending Institution for transferability of courses already taken at other schools, or search by TAMU course for Texas A&M students planning to take courses elsewhere. See how the [website](#) works.

Howdy web portal supports online syllabus and curriculum vita



Custom processes in the Howdy web portal were implemented to comply with Texas Education Code 51.974, which mandates undergraduate course syllabi and instructor curriculum vitae be made available through the class schedule. Instructors and course associates can upload a PDF or associate a web link for either file through Howdy.

Enrollment Management system aids student recruitment efforts

Banner's Enrollment Management system was implemented to help admissions and recruiting staff identify and correspond with potential students using targeted campaigns. The system stores and tracks these interactions, and provides reporting tools to help analyze the university's recruitment efforts. The three Texas A&M campuses created and deployed 60 campaigns to reach out to and recruit potential students to meet institutional goals.

Administrative Services & Support

Additional 2011 Accomplishments

Lab Safety Acknowledgements move online

Instructors teaching lab courses no longer need to distribute and collect Lab Safety Acknowledgment forms from students. Students taking courses requiring the form, with the exception of some Honors courses, now complete it online in the Howdy web portal. Howdy's class roster screens were customized so instructors and course associates can view the acknowledgements and see which students have accepted them. No paper records are needed, since the electronic system retains the forms for the appropriate length of time. During FY 2011, 40,670 acknowledgements were submitted online.

More payment options make buying meal plans easier

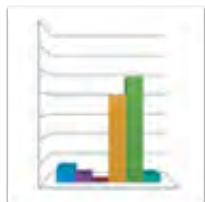


The Dining Services Meal Plan Tracker application simplifies selecting and purchasing meal plans online. Texas A&M IT modified the existing application to integrate new, convenient payment options. Students can purchase meal plans through their accounts on the Compass student information system or purchase by credit card using TouchNet, a secure online billing solution used by Texas A&M.

Survey gathers feedback on IT services

Texas A&M IT participated in the Higher Education TechQual+ Survey Project, which gathers feedback from faculty, staff and students to assess the quality of technology services. The TechQual+ project, sponsored by Pepperdine University, used a survey instrument that allows systematic exploration of 18 service areas that can be benchmarked and compared across institutions. While minimum expectations were exceeded in all areas, the survey results showed desired expectations were not met or exceeded in any category. Texas A&M IT intends to participate next year in the TechQual+ project. See results in the [2011 TechQual+ survey reports](#).

Customers rate telecommunication services



Customer surveys gauged satisfaction with Telecommunications' telephone, cellular and other services. Results showed 84 percent of respondents answered 'agree' or 'strongly agree' with the statement, "My overall experience was acceptable." These surveys help Telecommunications understand customers' views of the strengths and weaknesses of the department and to find out what improvements are desired. View the [survey results](#).

Administrative Services & Support

Additional 2011 Accomplishments

Voice mail service transitioned to a university-managed system

Telecommunications converted campus voice mail from a Verizon service to a university-managed system. The new system's hardware is owned by the university, reducing overall costs for providing voice mail. The November transition occurred smoothly and was transparent to most users.

Telecommunications online billing system in the works

Telecommunications will transition account billing to an improved system that includes online invoices and web-based service requests. The new system will lower costs by reducing printed bills that consume over 19,000 pages of paper every month. Extensive system testing occurred to ensure bill processing integrity. The new system is scheduled to go live in stages during FY 2012.

Voice-over-IP phone conversion continues



Transitioning the campus to Voice-over-Internet Protocol (VoIP) services continued with 904 phone lines converted to VoIP (81 percent increase) during FY 2011. VoIP lets users make phone calls over the Internet by converting analog audio signals into digital data. Conversion to VoIP is necessary because legacy phone systems currently being used are no longer manufactured. See progress of the VoIP conversion at the [Phone Line Metrics](#) page.

Audiovisual surveillance technology committee formed

Surveillance technology assist with providing a secure environment and protecting state property. To ensure the technology is used responsibly, surveillance equipment installation must be approved by the Vice President and Associate Provost for Information Technology (VPAPIT). An Audiovisual Surveillance Technology Committee was established by VPAPIT to review installation requests. [Read more at Audiovisual Surveillance](#).

Administrative Services & Support

Additional 2011 Accomplishments

Telecommunications director appointed to FCC's Emergency Response Interoperability Center committee



Texas A&M's director of Telecommunications, Walt Magnussen, was selected for membership to the Federal Communications Commission's (FCC) Emergency Response Interoperability Center (ERIC) Technical Advisory Committee. ERIC will develop a technical and operational framework that supports wireless broadband communications for America's first responders. The committee will make recommendations on policies and rules on technical aspects of the 700-MHz public safety broadband wireless network. [Read more at the FCC website.](#)

IT Risk Management changes focus to strengthen security

IT Risk Management, formerly called IT Issues Management, was reorganized to focus on regulatory risk; initiate policy for security of electronic information resources; and provide tools and services for risk management. ITRM's functions include IT policy, the Project Management Office, and compliance (ISAAC and accessibility in support of the ADA coordinator). [Read more about ITRM.](#)

ISAAC redesign begins

The IT risk assessment tool supporting the ISAAC (Information Security, Awareness, Assessment and Compliance) process is being redesigned by Networking & Information Security's Information Technology Risk Management group. The redesigned ISAAC tool will allow the university to develop targeted risk mediation strategies. It will drive security-related fund allocations by providing a more effective method of measuring and comparing IT risk at the resource, department, college and university levels. Planned changes include local administrative features for departmental and college IT management and collaboration tools designed to streamline the assessment process.

Research IT Infrastructure

Research network amplifies Texas A&M's cyberinfrastructure

A new data-intensive network is being deployed on campus to meet the growing demands of transferring large research data sets. The current campus network provides high-speed access for everyday uses, including connecting to the Internet, reading email and using web-based applications. Users experience speeds of 100 Megabits per second (up to 1 Gigabit per second (Gbps) in some circumstances) on the campus network, which is about 10 to 100 times faster than most home user's speed. However, even these high rates do not meet the data transfer requirements of computationally intensive research activities.



The data-intensive network (DIN) built in parallel to the existing campus network provides dedicated, on-demand bandwidth to efficiently transfer large, terabyte-sized data sets. "It's like building a separate autobahn for high-speed busses alongside the regular freeway," said Mr. Willis Marti, Director of Networking and Information Security. The DIN can carry "jumbo" packets of data - up to 9,000 bytes or six times larger than normal - at speeds up to 10 Gbps.

Large Hadron Collider

Physicists at Texas A&M need access to data from the Large Hadron Collider (LHC), the world's largest particle accelerator in Switzerland. Due to the vast amounts of data generated by the LHC, Dr. Guy Almes uses the DIN to efficiently move terabytes of information to the supercomputer at the Academy for Advanced Telecommunications and Learning Technologies in College Station. "The DIN helps our supercomputer serve the research needs of the high-energy particle physics group," said Dr. Almes.

Hurricane season simulations

To forecast the track and intensity of tropical cyclones, Mr. Gerald Creager uses computer models that require intensive supercomputing power to run. During hurricane season, simulations from four to 12 models are run daily, and often up to four times per day. Each day's run can generate a terabyte of data. "The DIN provided approximately an order of magnitude improvement in data transfer rates to about 8 to 9 Gbps. I can receive and analyze data from a run on the same day," said Mr. Creager.

“It’s like building a separate autobahn for high-speed busses alongside the regular freeway.”

Willis Marti, Director of Networking and Information Security

JUST HOW FAST IS THE DATA INTENSIVE NETWORK?

IF 1 EMAIL = 20 KILOBYTES:

625

EMAILS DOWNLOADED PER SECOND WITH CAMPUS NETWORK

62,500

EMAILS DOWNLOADED PER SECOND WITH DIN

Research IT Infrastructure

Texas universities unite in Lonestar partnership

Through a grant from the National Science Foundation and in partnership with Texas A&M University, Texas Tech University and other entities, the Texas Advanced Computing Center (TACC) at The University of Texas at Austin purchased Lonestar, one of the world's most powerful supercomputers. The \$12 million 22,656-core cluster is capable of 302 trillion computations per second (or 302 teraflops).

Through the partnership, Texas A&M was allocated 9 million hours on Lonestar per year for three years. From February to August 2011, Texas A&M researchers used 703,993 hours. With access to Lonestar and increased capacity of Texas A&M's clusters, next year's supercomputing hours are projected to have increased by 92 percent over the past five years.



Although most of Texas A&M's supercomputing takes place on Eos and Hydra, Lonestar facilitated research by providing access to a supercomputer than can run very large parallel jobs. Also, TACC has special protocols in place to handle export-controlled software and data on their systems.

Collaborative partnerships to fund large research endeavors such as Lonestar can provide wider access to advanced scientific resources. Read more about the [Lonestar partnership](#).

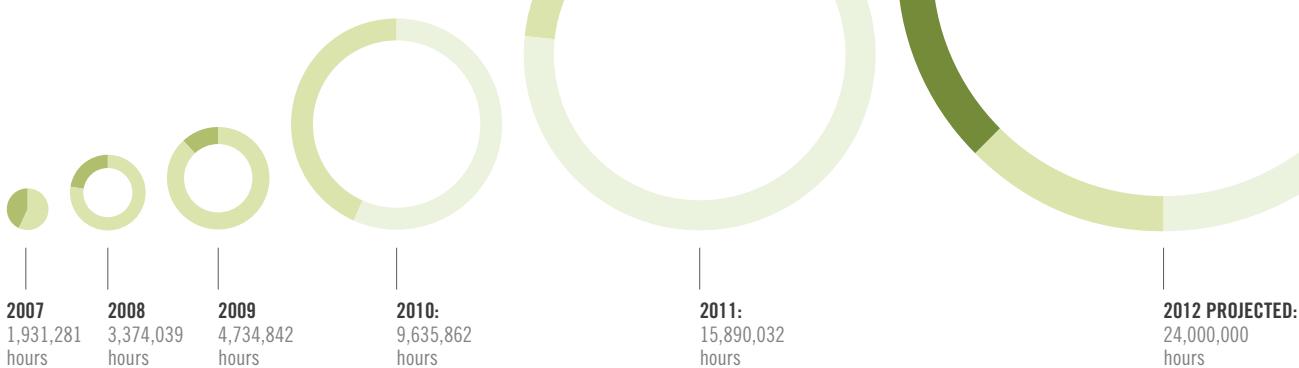
TEXAS A&M CONTRIBUTORS TO LONESTAR:

TOTAL COST:
\$500,000

\$125,000	\$125,000	\$250,000
OFFICE OF THE VICE PRESIDENT AND ASSOCIATE PROVOST FOR INFORMATION TECHNOLOGY	TEXAS A&M SUPERCOMPUTING FACILITY	OFFICE OF THE VICE PRESIDENT FOR RESEARCH

SUPERCOMPUTING USAGE HOURS¹

- EOS
- HYDRA²
- COSMOS³
- LONESTAR⁴



¹A supercomputing hour refers to engaging one cpu per core for one hour of clock time.

²One Hydra supercomputing hour is approximately equivalent to 0.5 hour of Eos supercomputing time.

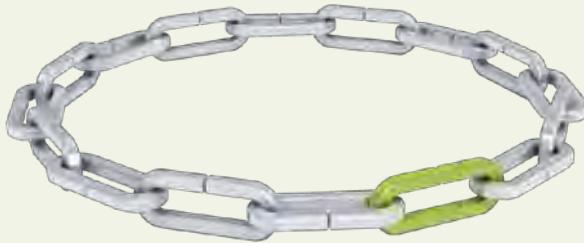
³Cosmos was transferred to the department of Chemistry in June 2009.

⁴Lonestar became available to Texas A&M users in February 2011.

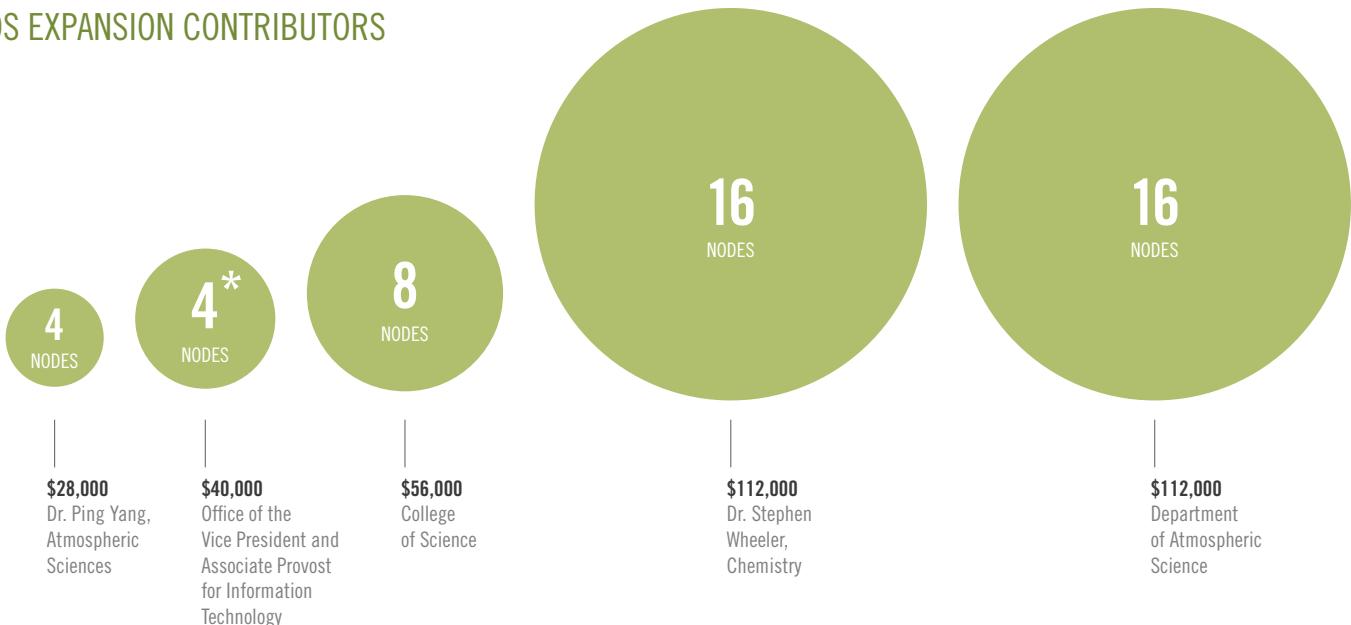
Research IT Infrastructure

Eos supercomputer expands to meet increasing demand

The Supercomputing Facility partnered with various university entities to add 48 nodes to Eos, which expanded computational capacity by about 22 percent. Forty-four nodes were sponsored by the College of Science, the department of Atmospheric Science, and grant funds of Dr. Ping Yang (Atmospheric Sciences) and Dr. Steven Wheeler (Chemistry). An additional four nodes with graphics processing units (GPUs) were funded by the Office of the Vice President and Associate Provost for Information Technology.



EOS EXPANSION CONTRIBUTORS



The Supercomputing Facility supports the university with expertise and leading-edge hardware for large-scale scientific computation. The facility supports a diverse spectrum of research including computational fluid dynamics, chemistry and physics, materials science, nanotechnology, geophysics, weather modeling and forecasting, as well as bioinformatics. Eos is the facility's main supercomputing resource, capable of 35.5 trillion computations per second (35.5 teraflops). Eos usage increased 55 percent from 5,462,725 hours in FY 2010 to 12,159,712 hours in FY 2011. Both Eos and Hydra clusters achieved nearly 100 percent operational availability throughout FY 2011.

48
NODES ADDED

\$348,000
TOTAL COST

COMPUTATIONAL CAPACITY
INCREASED

22%



Research IT Infrastructure

Advance support program aids supercomputing research

The Supercomputing Facility's team provides help on a wide range of issues from highly technical problems to basic account questions. Facility analysts offer intensive support to faculty researchers and graduate students to eliminate computational bottlenecks in the most specialized and technically challenging user projects. They provide expert assistance in a sustained way to help users optimize strategies in projects involving a sizeable computational component. This service typically requires high levels of technical expertise and a significant investment in personnel hours. The resulting benefits include obtaining computer results per run in a hours instead of days.

COLLABORATION
ACCELERATES
RESEARCH



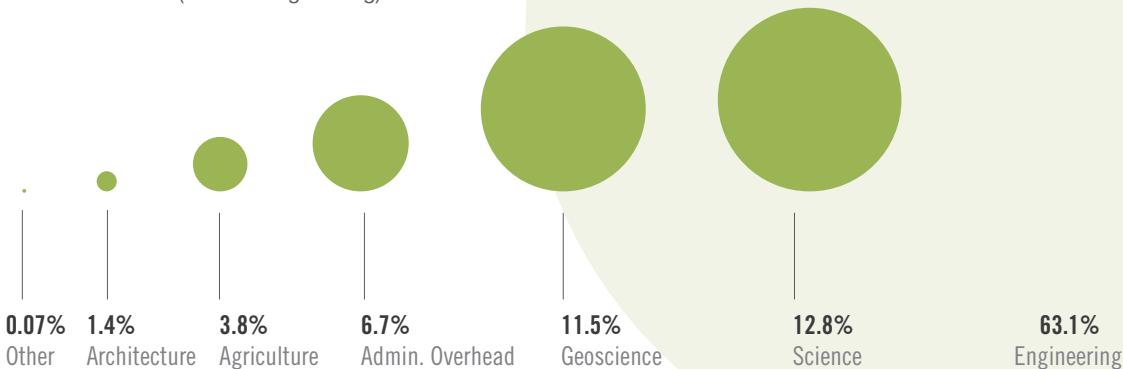
Continued and extensive collaborations illustrate this special service:

Facility analyst Dr. Raffaele Montuoro streamlined code used to investigate Atlantic region climate phenomena and hurricanes for the research groups of Dr. Ping Chang (Oceanography) and Dr. R. Saravanan (Atmospheric Sciences), which resulted in very high-resolution simulations. A grant awarded to the two research groups funds one-quarter of Dr. Montuoro's salary.

Facility analyst Ms. Ping Luo applied her expertise in code optimization and parallelization to boost performance of programs used in the research of Dr. Yassin A. Hassan (Nuclear Engineering).

2011 SUPERCOMPUTING HELP USAGE

1,476.1
TOTAL HOURS



Additional 2011 Accomplishments

Facility exhibits work at Supercomputing '10 conference



The Supercomputing Facility participated in Supercomputing '10, the premier international conference for high-performance computing. The facility collaborated with the Texas Learning & Computation Center at the University of Houston to showcase information and demonstrations of current projects. The exhibit took place in November 2010 at New Orleans, Louisiana.

Supercomputing Facility participates in SPXXL user group



The Supercomputing Facility participated in SPXXL, IBM's international user group focused on high-performance computing. Texas A&M has been a member of the organization since 2008.

Supercomputing Facility hosts user conference

The Supercomputing Facility hosted their annual user conference in May, highlighting the work of researchers who use the facility. Attendees participated in discussions and exchanged ideas on supercomputing and high-performance computing issues.

Short courses focus on supercomputing

Supercomputing Facility analysts taught short courses on supercomputing and scientific computation: Introduction to Unix, Introduction to Hydra, Introduction to Eos, Basic Code Profiling, Introduction to Parallelization with OpenMP and Introduction to Parallelization with MPI. A new course, Introduction to Perl, was added this year.

Shared IT Services

Discounted software reduces costs for all

The Texas A&M Software Center administers licensing agreements that allow students, faculty, staff and departments to purchase software at greatly reduced prices. As more A&M System members take advantage of discounted software licenses, improved volume-buying capabilities reduce overall costs. In FY 2011, the A&M System saved \$7,959,537 through the Software Center's licensing agreements.



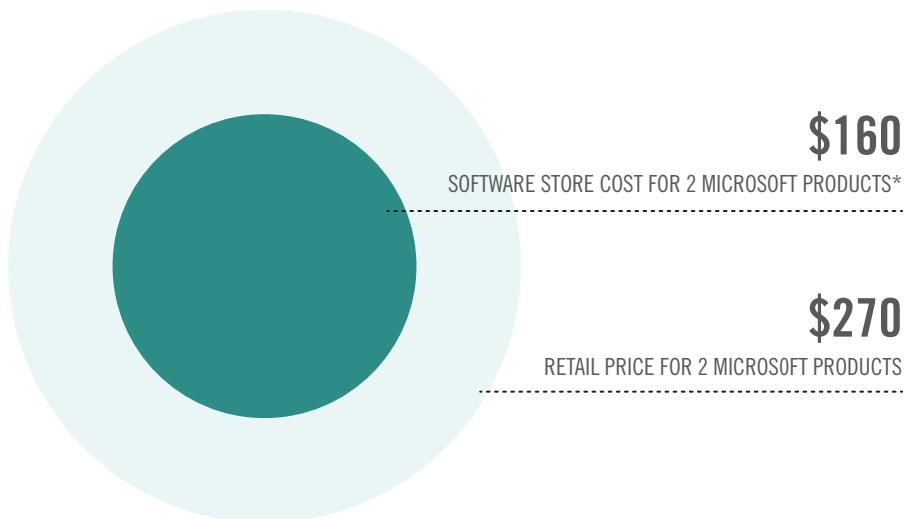
In Fall 2011, Prairie View A&M University added their students to the Microsoft software license agreement. Currently, students at the College Station, Galveston and Qatar campuses are enrolled in this license agreement. Students can save money if they purchase at least one product during four years of attendance.

Savings for employees, faculty and staff

Most A&M System members have enrolled their faculty and staff for discounted Microsoft software licenses. Through this agreement, departments purchase annual licenses based on full-time equivalent counts. Groups with more computers than employees (e.g., departments with computer labs) saved with this program versus buying separate licenses for each machine. Also, faculty and staff of participating entities become eligible to purchase select Microsoft products for personal use at greatly discounted prices. Eligible employees and registered students who purchased discounted software for personal use through Texas A&M's online software store collectively saved \$986,812 this fiscal year.

SOFTWARE SAVINGS BY THE NUMBERS

If the average new student purchased Microsoft Office and Windows upon arriving on campus, they'd pay \$20 for each product at the Software Store, in addition to \$120 in student fees over the course of 4 years.



*\$40 covers the media costs for 2 Microsoft products, and \$120 pays for the software licenses.



Shared IT Services

Technical experts provide custom IT solutions

The Texas A&M University Writing Center (UWC) offers students tutorial assistance to enhance their writing and speaking skills. With 45 consultants at two locations open six days per week including nights and weekends, the UWC needed a better way to manage and track appointments online. After much research, no commercially available web-based application met their requirements. The UWC turned to IT Solutions and Support (ITSS), a group that develops and deploys custom IT solutions, to create the Cleopatra Scheduling System. The system allows students to make appointments online and upload documents for review. Consultants can enter notes and track interactions with students, while center managers can follow daily operations with robust reporting tools.



“ Our collaboration with IT Solutions and Support allowed us to build our software around our business practices rather than building our business practices around our software, and as a result, we run much more efficiently.”

Dr. Candace Schaefer, UWC Associate Director

A successful collaboration

The Cleopatra system has been very successful for the UWC and is currently in a second phase of enhancement. “Our collaboration with IT Solutions and Support allowed us to build our software around our business practices rather than building our business practices around our software, and as a result, we run much more efficiently,” said UWC associate director Candace Schaefer. “Other university writing centers have expressed interest in using Cleopatra, since they also have unique practices and needs for functionality not found in most out-of-the box software packages.”

HOME HOME HOME HOME HOME
CUSTOMER TESTIMONIAL
THE MAKING OF
“CLEOPATRA”
UNIVERSITY WRITING CENTER



Visit ITSS.tamu.edu to read about the group’s application development, software maintenance, project management and LAN and workstation support services.

Shared IT Services

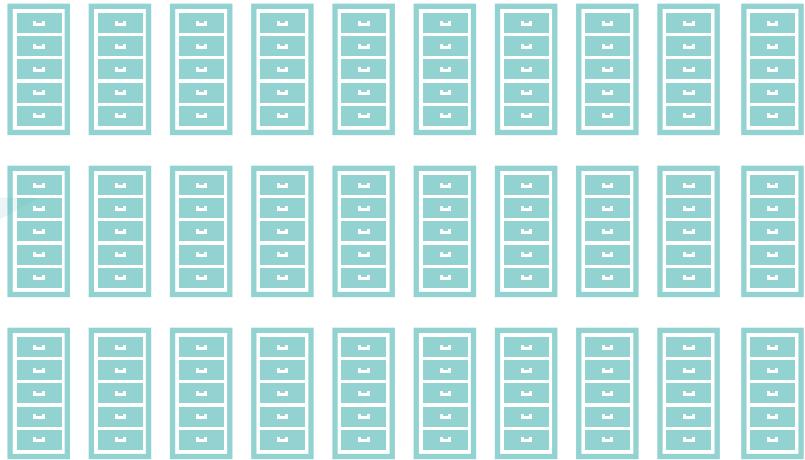
Managing information enterprise-wide with Laserfiche

With teaching, research, extension and laboratory facilities throughout Texas, Texas A&M AgriLife uses the Laserfiche electronic document management system to store and share information efficiently and cost-effectively. AgriLife has over 1,620,000 items into Laserfiche, reducing costs for paper, in-house storage cabinets, space allocations and off-site storage.



LASERFICHE

AGRILIFE HAS APPROXIMATELY 1,622,000 DOCUMENTS CONTAINING A TOTAL OF 10,400,000 PAGES STORED IN A LASERFICHE REPOSITORY.



Laserfiche was chosen as Texas A&M's preferred vendor for document management, with Texas A&M IT's IT Solutions and Support group designated to provide centralized support. In September 2010, AgriLife transferred their Laserfiche system to Texas A&M IT, so it could be expanded as a A&M System-wide service.

"By placing the system on [Texas A&M IT] servers, we have been able to tap into a large number of benefits, which has increased system reliability and expanded our backup and recovery capabilities. In addition, they shared services model has enabled us to work with other users to generate new ideas for workflows and document management that will benefit all users," said Mr. Robert Hensz, Texas A&M AgriLife Administrative Services.

Laserfiche is an effective platform for managing institutional data in a safe, secure manner. At AgriLife, Laserfiche reduces personnel costs by automating receipt and filing of documents from the A&M System's Financial Accounting Management Information System (FAMIS) and Budget/Payroll/Personnel (B/P/P) System.

THIS REPRESENTS APPROXIMATELY

320 FIVE-DRAWER FILE CABINETS

WITH NO FILE FOLDERS, DIVIDERS, ETC.

“ AgriLife has worked closely with Texas A&M IT to help make the Laserfiche shared services concept a fully functioning reality. To date, it has been working out even better than we envisioned. This type of shared service will tie us all closer together while saving resources.”

Robert Hensz, Texas A&M AgriLife Administrative Services

Shared IT Services

Virtualization expands with engineering college cloud

Texas A&M IT worked with the Dwight Look College of Engineering to create the first “college cloud.” This private cloud will provide computational resources from virtual servers in the university data centers, allowing the college the option to move data from 27 server rooms in 11 buildings. The college will store 192 terabytes with data mirrored between the main campus and west campus data centers.



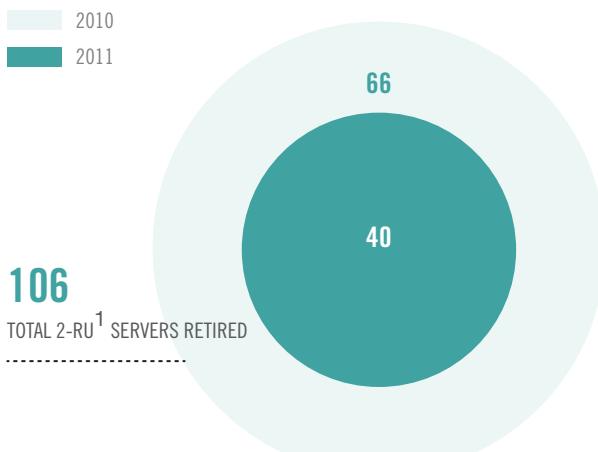
College cloud maximizes IT

The move to the Texas A&M IT data centers helps provide operational efficiency and flexibility for the college. “[Texas A&M IT’s] Computing & Information Services has an excellent operations staff, who free us from taking care of hardware and allow us to be more productive. With today’s technology, there is no need to have access to physical servers. We can manage our virtual servers as if they are sitting in front of us,” said Dr. Fred Fisher, Texas Engineering Experiment Station, Dwight Look College of Engineering. The college estimates the Engineering cloud will save \$80,000. The cloud complies with state law, since the college’s data continues to reside within the State of Texas.

CENTRALIZED VIRTUALIZATION CONTINUES

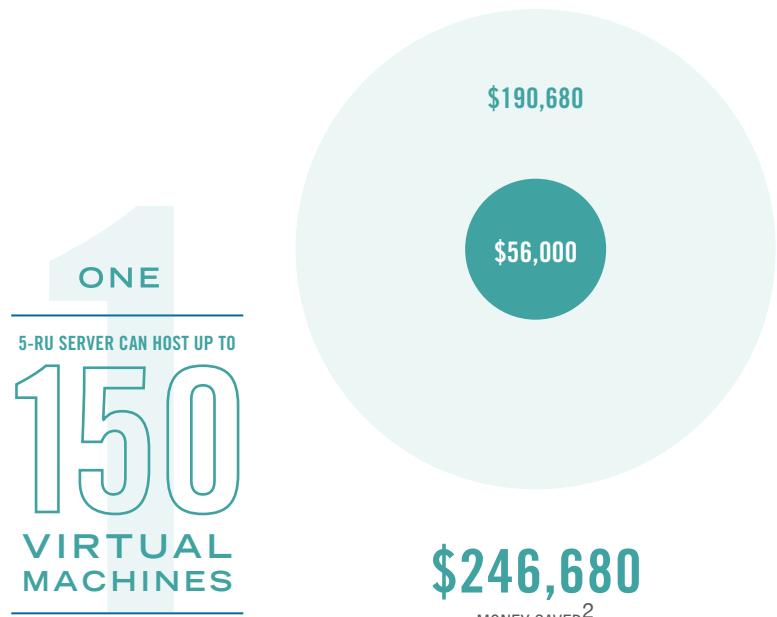
Expansion of server virtualization and storage infrastructure in the data centers continued in FY 2011. Another 40 conventional 2-RU servers were retired and replaced with six 5-RU virtualized servers. In FY 2010, applications on 66 servers were moved to 2.8 5-RU servers. Virtualization replaces the one-server-per-application model by running multiple applications (up to 150 “virtual machines”) on a single physical computer. Virtualization saves space, lowers power consumption and cooling requirements, and reduces equipment and server administration costs.

VIRTUALIZATION BY THE NUMBERS



8.8
TOTAL 5-RU VIRTUAL SERVERS INSTALLED

2.8
6



¹RU = rack unit, measures the amount of space occupied by equipment mounted on a rack

²A 2-RU conventional server on a three-year replacement cycle costs \$3,500, and a 5-RU virtualized server on a five-year replacement cycle costs \$14,000.

Shared IT Services

Additional 2011 Accomplishments

Shared Exchange service continues to grow



Over 1,000 new users were added to the Exchange email service. Work began to add Microsoft Lync services and VoIP integration this coming year, which will integrate email, voice communications, instant messaging and conferencing.

Galveston students added to Meal Plan Tracker

At Texas A&M University at Galveston, Dining Services staff no longer need to manually perform meal plan registration, order tracking and billing. IT Solutions and Support enhanced the Meal Plan Tracker application to share the service with the Galveston campus. Students can log in with their NetID and password, select meal plans, and elect to pay through their Compass accounts or by credit card. This shared online service resulted in operational savings since billing occurs automatically to these accounts.

Code Maroon website redesigned



The redesigned Code Maroon website provides more information about the university's emergency notification system, including delivery statistics from the system's monthly tests. Started in 2007 with two alert channels, text message and email, Code Maroon can now send notifications via KAMU-FM radio, campus cable television, Emergency Alert System radios, computer alerts, classroom alerts, Twitter and RSS. IT Solutions and Support implemented and manages the integrated solution used to communicate to over 49,000 students and thousands of employees during a crisis.

Office computing support provided to multiple departments

A team of highly qualified IT professionals ensures efficient departmental computing through server and workstation support. IT Solutions and Support's Office Computing Support Services group assists 11 departments on a contract basis, and several other departments opted for as-needed, ad-hoc support. The group supports 406 users with 525 workstations and 194 servers.

Additional 2011 Accomplishments

Enterprise system streamlines web content management

Texas A&M IT purchased an enterprise license for Hannon Hill's Cascade Server web content management system to facilitate managing university websites. The enterprise license allows unlimited users and site publishing. Texas A&M IT transitioned many of its websites into the system. University Marketing & Communications will use Cascade Server to manage its sites, including the main university website, www.tamu.edu. Texas A&M University at Galveston (TAMUG) also has moved sites into the system. IT Solutions and Support provides central support for Cascade Server, which now has 200 users.

Qualtrics survey tool site license acquired



Texas A&M purchased a site license for Qualtrics, a software-as-a-service application for designing, distributing and analyzing surveys. The license cost will be shared by subscriber groups, which include Measurement and Research Services, Student Life Studies, Texas A&M IT, five colleges, as well as the Galveston and Qatar campuses. Texas A&M Software Center will manage the Qualtrics license. Qualtrics is a preferred tool for campus surveys because it meets stringent information security requirements not found in most free online survey tools.