Interim CIO: Brian Nichols

Office of the CIO:
- Security & Policy Office: John Borne
- Human & Financial Resources Office: Susan T. Crochet
- Communications & Planning Office: Sheri J. Thompson
- ITS Faculty Liaison: Randall P. Hall, Professor of Chemistry
- LOUIS: Sara Zimmerman, Executive Director
- LONI: Donald Vandal, Executive Director

Information Technology Services:
- User Support & Student IT Enablement:
  - Melody Childs, Deputy CIO
  - Pamela S. Nicolle, Director Faculty Technology Center
  - Michael P. Smith, Director Technical Services
  - Stacey B. Morales, Director Customer Service
  - Samuel P. White, Interim Director High Performance Computing
- University Information Systems:
  - Cynthia M. Hadden, Deputy CIO
  - David Alexander, Associate Director, IS Architecture
  - Frank O’Quinn, Associate Director, Systems Programming
  - Stephen Heyward, Assistant Director, Distributed Systems and Technology Administration
  - Robin R. Ethridge, Director, Portal Technologies and Academic Analytics
  - Douglas A. Pacas, Director, Financial Information Systems
  - Byron D. Honore, Director, Enrollment Information Systems
- University Networking & Infrastructure:
  - Ric Simmons, Deputy CIO
  - Sean G. Robbins, Director Network Engineering
  - Terry Doub, Director Network Operations

Information Technology Services
Louisiana State University
200 Frey Computing Center
Baton Rouge, LA 70803

P: 225-578-3700
F: 225-578-6400
E-mail: itsinfo@lsu.edu
Web site: www.lsu.edu/vcit
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter from the Interim CIO</td>
<td>02</td>
</tr>
<tr>
<td>Nationally Speaking</td>
<td>03</td>
</tr>
<tr>
<td>Torchbearer Awards</td>
<td>05</td>
</tr>
<tr>
<td>LOUIS</td>
<td>06</td>
</tr>
<tr>
<td>FITS</td>
<td>08</td>
</tr>
<tr>
<td>Faculty Senate IT Governance</td>
<td>09</td>
</tr>
<tr>
<td>Year in Review</td>
<td>10</td>
</tr>
<tr>
<td>LONI</td>
<td>12</td>
</tr>
<tr>
<td>Customer Service</td>
<td>14</td>
</tr>
<tr>
<td>Tech Talks/FTC Events</td>
<td>14</td>
</tr>
<tr>
<td>TechPawlooza</td>
<td>15</td>
</tr>
<tr>
<td>UIS</td>
<td>16</td>
</tr>
<tr>
<td>myLSU</td>
<td>17</td>
</tr>
<tr>
<td>Moodle: Fall 2011</td>
<td>18</td>
</tr>
<tr>
<td>The Advancing Network</td>
<td>19</td>
</tr>
<tr>
<td>Financial Report</td>
<td>20</td>
</tr>
</tbody>
</table>
Dear Colleagues:

I’m pleased to present you with the 2011 Annual Report from Information Technology Services (ITS). Aptly called Momentum, the Annual Report details the continued progress of our organization amid transition and continued budgetary constraints. I’m very appreciative of the time you’re taking to review the Annual Report. I continue to feel strongly that the IT environment in place and advancing here at LSU is the product of the broader, campus-wide partnership that exists with ITS, our students, faculty, other instructors and researchers, and the staff across the campus.

Indeed, ITS maintained its forward momentum throughout 2011. On the networking and infrastructure side, we proved to be a leader in IPv6 development, upgraded the network connectivity for the University’s research core, and continued to provide a robust wired and wireless environment campus-wide.

In addition, we continued to provide a first-rate support environment. Our Help Desk answered 27,119 phone calls and the Faculty Technology Center sponsored five faculty-driven events. ITS’s Geaux WiFi program, which directly assists students and faculty in connecting devices to the campus’s secure wireless environment won the 2011 ACUTA Institutional Excellence Award.

Per the revised Flagship IT Strategy published in February 2011, LSU released its new myLSU portal in October. In addition, we began the process of analyzing our business processes in order to replace the legacy information systems which run the institution’s processes.

2011 was a year of firsts for ITS as well. ITS hosted its first TechPawLooza in March. Approximately 600 members of the campus community joined in this event that featured presentations from both vendors and faculty. ITS awarded its first Torchbearer Awards for Leadership in IT Advancement to University Registrar Robert Doolos and Assistant Professor Elaine Maccio. Lastly, ITS participated in World IPv6 Day, one of only a few higher education institutions to do so.

2012 promises to be one filled with continued progress and firsts. LSU has begun the process of moving its institutional e-mail to the cloud. With this migration, the University will be one of the first in the country to move to Microsoft’s Office 365 solution. Furthermore, ITS and the CCT are in the process of acquiring a new HPC cluster that will replace Tezpur and fully support LSU’s research and educational missions. The build out of power and cooling infrastructure for LSU’s main data center in Frey will also be completed in 2012. Moodle 2.0 will be implemented in 2012, which will offer improved service, and the process of establishing a roadmap for the future of the core enterprise information systems at the University will continue. In closing, a new chief information officer is expected to join the university sometime in 2012, bringing a new vision and ideas for continued momentum.

Thank you again for taking a moment to read this report and for your support of efforts to advance IT at LSU.

Sincerely,

Brian T. Nichols
Interim Chief Information Officer (CIO)
Nationally Speaking

Borne, John
- Communicating in Emergency Situations, ACUTA

Childs, Melody
- Evolving Technologies: A View to Tomorrow, EDUCAUSE Review
- Distributed Technology Support, EDUCAUSE 2011
- Version Control and Change Management for Your Career, Yale University
- Gen Z and Beyond: Evolving Support Services for Millennial Students, Yale University
- Member, ACUTA Environmental Scanning Committee
- Member, ACUTA Awards Committee
- Member, EDUCAUSE Evolving Technologies Committee
- Member, Moodlerooms Advisory Council
- Senior Reviewer, EDUCAUSE Quarterly

Esmail, Hala
- Making Your Moodle Course Student Friendly West Coast MoodleMoot
- Making Your Moodle Course Student Friendly Louisiana MoodleMoot

Ethridge, Buddy
- Faculty Support for Moodle: Never Underestimate the Need for Humanware (co-presenter with Pam Nicolle), Louisiana MoodleMoot
- Improving Accessibility in Moodle: Exemplary Practices, West Coast MoodleMoot
- Balancing FERPA Compliance with Community Demands, West Coast MoodleMoot
- Governance and Support Structures for Moodle: Hearing Every Faculty Voice (co-presenter with Pam Nicolle), EDUCAUSE

Ethridge, Robin
- Member, EDUCAUSE Challenge Panel of Next Generation Learning Challenges Initiative

Fazely, Michael
- IPv6 for LSU, LONI Technical Forum
- Transitioning to IPv6 on Your Campus, ACUTA IPv6 Webinar
- IPv6 Workshop, Internet2

Hadden, Cindy
- Member, EDUCAUSE 2011 Annual Conference Program Committee
- Member, EDUCAUSE 2011 Enterprise IT Leadership Conference Program Committee (Past Chair)
- Facilitator, EDUCAUSE 2011 Annual Conference, Enterprise Risk Management Discussion Session
- Member, CISD

Hamburg, Cary
- Using Moodle Book Feature for Collaboration in Resource Creation, International Conference on eLearning

Handal, Jeffry
- IPv6 and What it Means to the Future of Data and VoIP, ACUTA Annual Conference
- Career Development Workshop, IEEE Metropolitan Area Workshop (moderator)
- Career Derailers, IEEE Metropolitan Area Workshop
- Member, ACUTA Young Professional Subcommittee
- Member, Internet2 Joint Tech Program Committee
- Member, IEEE Region 5 Executive Board
- Member, IEEE Employment & Career Service Committee
- Member, IEEE K-12 Stem Literacy Committee
- Co-Chair, IEEE Green Technologies Conference & Region 5 Meeting
- Strategic Advisor, IEEE Member & Geographic Activities Unit Operations Support Committee

Honoré, Byron
- Reader/Reviewer, EDUCAUSE 2011 Annual Conference (Enterprise Information Systems Track)

Jones, Kelli
- Help Desk and Customer Service: One Love!, Yale University, 2011

Laird, Mary
- LOUIS Services Overview, Grambling State University

Nichols, Brian
- Information Technology Trends and Implications for Privacy, Security, and Risk Management, URMIA 2011 Annual Conference
- Business Continuity Management, EDUCAUSE Annual Conference

Nicolle, Pam
- Faculty Support for Moodle: Never Underestimate the Need for Humanware (co-presenter with Buddy Ethridge), Louisiana MoodleMoot
- Governance and Support Structures for Moodle: Hearing Every Faculty Voice (co-presenter with Buddy Ethridge), EDUCAUSE
Russo, Robert
• Taking Ownership of Open Source, Louisiana MoodleMoot
• The LSU Early Academic Referral System, Louisiana MoodleMoot
• Moodle after Three Years: A Postmortem, West Coast MoodleMoot
• Taking Ownership of Open Source: Customizing Moodle, West Coast MoodleMoot
• LMS Analytics with the LSU Early Academic Referral System, West Coast MoodleMoot
• The LSU Early Academic Referral System, EDUCAUSE
• Maintainer, Moodle Gradebook
• Member, 2012 Louisiana MoodleMoot Planning Committee
• Member, 2012 West Coast MoodleMoot Planning Committee

Sicard, Cathy
• LOUIS Update, Louisiana Library Association Conference
• LOUIS Update, Higher Education Summit
• LOUIS: The Louisiana Library Network and Your College, LCTCS Annual Conference

Simmons, Ric
• Hosted VoIP or PBX? Depends on Your Funding Model, ACUTA Summer Seminar
• The Heat is On: Taming the Data Center, Campus Technology
• Where is the Telephone Industry Headed? ACUTA Winter Seminar (moderator)
• Program Chair, ACUTA
• Member, ACUTA Corporate Liaison Committee
• Member, EDUCAUSE Community Engagement Task Force

Sirman, Karen
• Implementing Lynda.com on a college campus, EDUCAUSE Southwest Regional Conference

Stigall, Lisa
• LOUIS Services Overview, Grambling State University

Thompson, Sheri
• Introducing myLSU Portal, CampusEAI Consortium Annual Conference
• Member, CampusEAI Consortium Advisory Council
• Reviewer, EDUCAUSE Quarterly

Zimmerman, Sara
• The Razor’s Edge: Louisiana’s State Budget & Serials Crisis of 2010-2012, NASIC Conference
• LOUIS Update, Louisiana Library Association Conference
• LOUIS Update, Higher Education Summit
• LOUIS: The Louisiana Library Network and Your College, LCTCS Annual Conference
• Peer Mentor, Association of College & Research Library Louisiana Chapter
• Member, EBSCO Academic Advisory Council Committee
• Member, OCLC Metadata Working Group

White, Sam
• LONI: State of High Performance Computing, LONI Technical Forum
Information Technology Services held its first ever recognition event honoring the non-ITS faculty, staff and students who serve on various committees and assist ITS in its everyday endeavors. ITS also introduced the Torchbearer Award for Leadership in IT Advancement which recognizes a student, staff or faculty member who has greatly assisted ITS in successfully deploying a new service or resource during the previous year. Nominated by a staff member in ITS, these individuals’ efforts on our behalf have greatly improved the IT environment for the entire campus. Robert Doolos and Elaine Maccio were the inaugural winners of this award.

Robert Doolos, University Registrar, has served the campus in an exemplary fashion for 3 decades. He has been a vocal champion for students’ record privacy, architected IT systems for the preservation and management of student records, and been our staunchest supporter. Through his leadership this past year we have deployed myProxy, a resource which enables students to provide limited access to parents for the purpose of paying bills and even seeing final grades, added the “waitlist drop” option to course waitlisting, and developed necessary contract language with our Security & Policy group to handle outsourced services. Currently he is serving on the institution’s Enterprise Task Force to identify the resources we will need to make our administrative systems ready for future generations of faculty, staff and students.

Elaine Maccio, Assistant Professor of Social Work, in the words of her nominator “exemplifies the dedication, courage and leadership the very term torchbearer brings to mind.” Last spring, Dr. Maccio volunteered to teach her Social Work course completely online using Adobe Connect as we worked through delays, connectivity issues and unforeseen problems. Throughout the transition period, she remained positive, flexible, and focused on finding creative solutions rather than dwelling on the obstacles we faced deploying this new technology. Her close contact and detailed communications with the FTC enabled us to track and solve technical problems, making the Adobe Connect product a viable teaching resource. A true pioneer, this individual has encouraged and inspired others to teach online using Adobe Connect. She has been both generous and enthusiastic in sharing her experiences, and has been a guest speaker at FTC Coffee Talks throughout the year. Her contributions and efforts were truly valuable in the implementation, promotion and continued improvement of the new Adobe Connect service at LSU.
LOUIS: The Louisiana Library Network

LOUIS: The Louisiana Library Network Consortium was established in 1992 as a collaboration among Louisiana’s academic libraries to provide and enhance equal access to library services and information resources to all publically funded academic libraries; to maximize the purchasing power of the consortium; and to save money and share expertise in order to support research, teaching and learning on each campus. LOUIS supports all libraries in the University of Louisiana System, the Louisiana Technical and Community College System, the Southern University System, the Louisiana State University System, the Louisiana Academic Independent Colleges and University Network, and LUMCON. In addition, LOUIS works closely with the State Library of Louisiana, parish libraries, state archives and museums, and private museums. LOUIS continually considers the needs of K-12 when negotiating for e-resources.

This was a trying yet successful year for the LOUIS consortium. For the first time in almost two decades the funding model changed resulting in strategic cuts and a grassroots publicity campaign. Driven by the passion of the librarians and staff in academic libraries, the effort to garner support to reinstate funding accomplished three goals: first, to establish funding for the 2010-11 fiscal year; second, to publicize the LOUIS consortium and the benefits to academics and the state; and third, to establish a sustainable funding model for the future. All three goals were met in HCR 129 and the willingness of the new Commissioner of Higher Education to acknowledge and support the contributions of the consortium. Regent support will once again be the single most important factor in the success of delivering services and resources to all colleges and universities in Louisiana equally, thus “leveling the playing field” while “doing more with less.”

LOUIS is supported by a central support staff of eight, located on the LSU campus, and provides information technology solutions to consortium members in a cloud computing environment. All services and resources offered are recommended by committees and approved by the LALINC Executive Committee which is comprised of Deans of LOUIS libraries. These services and resources are provided at one-sixth the cost it would be if each library attempted to implement this on its own. In 2010 alone, LOUIS purchased over $19 million worth of services and resources on behalf of Louisiana’s academic libraries for $3.2 million. This is a savings of almost $16.8 million. Since 1992, LOUIS has saved the state of Louisiana over $167,566,780.

The history of LOUIS funding demonstrates that adequate funding creates success. In 1992, LOUIS funding was sustained by grants from the Board of Regents, the Federal government and member fees. In 1995, the state legislature allocated $1,085,000 to LOUIS via the Board of Regents and the remainder of the budget was funded through membership fees. By 2000, based on the success of the collaboration and the fact that all institutions benefited equally, the Board of Regents support of LOUIS grew to $2,737,601 (70%) of the budget. Members provided the additional $1,173,258 (30%). This 70-30 split remained through 2009.

In 2010, due to Board of Regents budget cuts, the LOUIS consortium funding was reduced to $500,000 (16%). The consortium implemented strategies to reduce the total budget to $3.167M. Members made up the remaining $2.67 million (84%) budget with a stipulation that they could not sustain this type of support in coming years. If the consortium did not regain State/Regents funding, each library member would have to determine what it could afford and drop services and/or resources. This would imperil the fundamental goal of the consortium: to provide the same services and resources to all libraries. LOUIS members created a grassroots effort to raise awareness of the fundamental need to reinstate state support for a project that has been extraordinarily successful in “doing more with less”. In 2011, the grassroots effort was successful and the Board of Regents obtained $500,000 from state appropriations. Along with the continued commitment of $500K, the Board of Regents supported LOUIS with $1 million (27%). Membership fees made up the remaining $2.674 (73%) of the budget. The Regents also provided an end-of-year grant for $150k to offset reductions in funding.

The sudden drop in funding also resulted in a two-part fiscal cycle of two months followed by ten months. This was necessary in order to continue services for the 2 months with the funding available ($500k) while working on the remaining 10 month strategies for services, resources and funding. Through all the distraction of funding issues, the LOUIS staff continued to provide exceptional service to members and this report details those accomplishments. This executive summary provides some of the highlights of the past 10 months.
LOUIS was successful in licensing and providing the following services and resources:

- SirsiDynix Symphony, the library staff client and the electronic catalog
- SirsiDynix Web2, the union catalog
- OCLC Atlas ILLiad, the inter-library loan system
- OCLC CONTENTdm, the digital library system
- LinkSource and A-to-Z, the URL resolver and title list for LOUIS resources
- EZproxy authentication technology
- 77 Electronic Resources (academic journals, full-text and abstracting services, citation databases, etc.)

The major highlights from this past year include:

- Loaded, on average, 140,000 A-to-Z records each month for 30 sites
- Renewed 77 e-resources by negotiating deep discounts and 10 month licenses
- Invoiced and received payment or PO’s from all LOUIS members
- Hosted one System Administrators’ Meeting
- Met with the LALINC Executive Committee monthly
- Spoke to newspapers, radio hosts, faculty, staff and system administrators on the funding crisis
- Met with LLN Commission and Board of Regents 8 times
- Upgraded the SirsiDynix Symphony system on Beta, Training and Production servers
- Conducted Symphony e-Library training classes
- Worked with MARCIVE to fine-tune the MARC file processing
- Conducted training at Delta Community College
- Circulated over 1.2 million items through Symphony WorkFlows
- Provided results for over 4 million searches in Symphony e-Library
- Conducted CONTENTdm training for the State Library of Louisiana
- Continued to implement new and enhanced Symphony functionality
- Added to and maintained existing documentation database with 700+ documents
- Worked with SirsiDynix to improve upgrade scripts
- Worked with UNIX server administrators in the areas of disk space management, security, backup and recovery, and operating system maintenance
- Worked with LOUIS sites and EBSCO to continue to enhance the A-to-Z with MARC service

- Attended user conferences for SirsiDynix, ILLiad, and CONTENTdm
- Implemented numerous custom processes and completed database cleanup projects for LOUIS members
- Actively communicated with sites using email, listservs, and social networking tools such as Twitter, Facebook, YouTube and the LOUIS website
- Managed 10 listservs
- Hosted the LOUIS Boot Camp for new System Administrators
- Upgraded the subnet for EZproxy authentication software
- Supported 14 mini-consortiums for electronic resources purchased on behalf of subsets of LOUIS member libraries
- Offered trials of new e-resources
- Completed 95,781 interlibrary loan requests
- Customized ILLiad pages
- Coordinated and led North and South LOUIS ILLiad users meetings
- Implemented a full-featured trial of EBSCO Discovery Service (EDS)
- Published the LOUIS Newsletter
- Hosted the 33rd System Administrators’ Meeting
- Made 8 presentations including presentations to the Legislature
- Served on various committees with library industry staff regionally, nationally, and internationally
- Participated in beta testing processes with SirsiDynix and CONTENTdm
- Wrote scripts to capture SirsiDynix Symphony usage statistics in Microsoft Excel format
- Wrote scripts to capture LOUISiana Digital Library statistics
- Added 8 new collections to the LOUISiana Digital Library
- Facilitated the addition of 37,314 new items to the LOUISiana Digital Library for a total of 190,614 items
- Investigated, selected, and implemented new software (WordPress) to host the LOUIS website to replace the soon-to-be obsoleted Lotus Notes platform
- Investigated and tested various solutions to replace LOUIS Contacts (WordPress) and Documentation (FootPrints Knowledge Base) databases to replace the current Lotus Notes platform
- Re-subscribed to Oxford English Dictionary
The revised Flagship Information Technology Strategy (2011) was published in February. Composed by the Faculty Senate IT Governance Councils, FITS (2011) set forth over 60 action items of which 46 were in progress during 2011. Some highlights from this year are presented here:

- **FITS Action Item 1.01** recommends the establishment of an annual process for upgrading all of the computers used across campus. While a mechanism for maintaining up-to-date equipment has not been established, some progress was made in securing modern IT. Through end of the year funding, LSU ITS bought 243 workstations for use by the College of Education, College of Art & Design, College of Science.

- **FITS Action Item 1.03** calls for the modernization and maintenance of Frey. Significant progress was made on this item. In 2011, LSU ITS completed its power & cooling project, more than doubling the power available in Frey.

- **FITS Action Item 1.05** states that the campus network needs to be able to handle large volumes of traffic. In 2011, ITS completed the installation of 15,650 feet of 12-strand singlemode fiber and upgraded routers and switches increasing the capacity for many research intensive buildings to 10 gig and 1 gig at the desktop.

- **FITS Action Item 1.06** states that e-mail storage needs to be significant. In 2011, ITS made the decision to migrate from on-campus Exchange 2003 to Microsoft 365’s cloud solution, increasing individual e-mail storage from 1G to 25G.

- **FITS Action Item 2.07** requests multiple means of IT skills training. In 2011, ITS released mySTART, a suite of online training resources through lynda.com.

- **FITS Action Item 5.01** calls for regular security audits of LSU’s IT resources. In November, external consultants visited campus to conduct a Security Audit.

- **FITS Action Item 6.07** says that the University must develop a strategy for providing high performance computing resources. In 2011, HPC support moved to ITS and a plan to replace Tezpur, the University’s supercomputer.

- **FITS Action Item 7.01** states that LSU’s learning management system should continue to evolve. This year Adobe Connect was integrated into LSU’s Moodle and extensive changes to Moodle with the release of Moodle 2.0 are scheduled for next year. Alpha testing of Moodle 2.0 was completed in 2011.

- **FITS Action Item 7.04** seeks ways to encourage faculty to integrate technology into the learning experience. ITS hosted its first TechPawLooza, a hands-on celebration of technology use across campus and the Faculty Technology Center sponsored faculty-led events like Coffee Chats where faculty would share with their colleagues the ways in which they use technology in the classroom.

- **FITS Action Item 7.08** calls for robust mechanisms to support distance education, course content capture infrastructure and mobile computing. ITS introduced Adobe Connect enabling the distance teaching of several courses in 2011.

- **FITS Action Item 8.01** says that the University must work to replace its mission-critical enterprise systems and move toward implementation of an enterprise resource planning (ERP) solution. The University should conduct a needs assessment and gap analysis as well as establish a timetable for the migration and a strategy for implementation before the end of 2015.

In 2011 the University hired Collegiate Project Services (CPS) for enterprise information system modernization project planning support. Next year the gap analysis will be conducted and CPS will report its findings, which will include an assessment of the implementation strategies available to the University, as well as a readiness and cost assessment.
Faculty Senate IT Governance Advisory Council

**Teaching & Learning Council**
Lawrence Rouse (chair) – Coastal Studies  
William Grimes – Music  
Joseph Legoria – Accounting  
Sarah Liggett – English  
Lu Peng – Electrical & Computer Engineering  
Kresimir Rupnik – Chemistry

**Infrastructure & Support Council**
Anne Osborne (chair) – Mass Communication  
Jennifer Jolly – Educational Theory, Policy & Practice  
Suresh Rai – Electrical & Computer Engineering  
Bruce Sharky – Landscape Architecture  
Chuck Wilson – Coastal Studies

**Research Enablement Council**
Barbara Dutrow (chair) – Geology & Geophysics  
Alice Daugherty – LSU Libraries  
Susan Dumais – Sociology  
Juana Moreno – Physics & Astronomy  
David Senior – Veterinary Medicine  
Philip Tebbutt – Interior Design
Year in Review

January
- FITS 2011 Released
- mySTART Released

February
- TechPawLooza
- New Firewall

March
- Adobe Connect

April
- LSU received the ACUTA Award for Institutional Excellence
- Purchased Back Up Internet Services

May
- LSU named eCampus Magazine's Campus of the Month
- HPC Support Moves to ITS
- FTC Offers Virtual Assistance

June
The Louisiana Optical Network Initiative (LONI) has become an integral part of the technology infrastructure for Louisiana postsecondary education which provides services and connectivity to the community on a seamless and continuous basis at costs that are significantly lower than institutions were paying previously to the existence of LONI.

Network Development and Enhancement

There were a considerable number of new and expanded network connections to LONI by the postsecondary education community through the 2010-2011 fiscal year. There was also a clear trend of several institutions and campuses acquiring expanded broadband capacity connections to LONI, which deployed to provide more robust transmission capabilities, to provide expanded research capacity, to handle remote storage for disaster response and recovery, and for general broadband capacity for campus commodity Internet service. In addition, LONI continued work on future entity connections, such as LONI connections for the Cyber Innovation Center, the Louisiana Cancer Research Center, the BioInnovation Center, Stennis Space Center, and Xavier University.

The following institutions and campuses gained access to or enhanced service from LONI this past fiscal year:

- Nicholls State University (through a more reliable vendor-provided circuit connection, although still limited to a specific functional use only)
- LSU Alexandria was provisioned 50 Mbps of service
- The UNO NIMS Center was provisioned 50 Mbps of service
- Northwestern State University was provisioned 10 Mbps service to Rapides Medical Center
- LSU Health Sciences Center data operation at DPS facilities was provisioned 1000Mbps of service
- SUNO was provisioned 50 Mbps of service
- Upgraded service to La Delta Community College to 100 Mbps service
- Upgraded Pennington Biomedical Research Center to 1000 Mbps service
- Upgraded the LTC headquarters to 20 Mbps service
- University of Louisiana – Lafayette acquired enhanced connectivity to its remote data storage location at ULM

There were also several instances of modifications and improvements in network configuration and operations:

- The new fiber installation at La Tech was completed providing comprehensive north ring redundancy
- The fiber route between the State ISB facility and the State Office Building and then to the Wampold City Plaza I, Level 3 collocation was completed and implemented
- New network management systems were implemented using Statseeker and Intermapper tools
- The LSU AgCenter service was moved to the LONI backbone at ISB
- Activated IPv6 with the Time Warner and Qwest internet connections
- Upgraded the Akamai service to 10GE level of transmission
- Moved LOUIS data backup storage to the La Tech Data Recovery Center
- Converted the Tulane 100 Mbps service to Houston to new Internet 2 equipment
- Upgraded software on the southern ring

High Performance Computing (HPC) Operations

During FY2010-11 there was continuing discussion, research and evaluation of the high performance computing infrastructure supported by LONI, particularly with respect to the IBM P575 clusters. Those units were part of the original LONI deployment in FY2005-06 and they were clearly showing signs of age and service disruptions. The assessment of the IBM P575 usage and performance was, however, part of a broader on-going assessment of the entire HPC infrastructure.

Statistics on usage of all components of the HPC infrastructure were compiled, shared with the Management Council periodically, and guided the discussion and planning for HPC decision-making. Although usage of the HPC infrastructure overall has continued to grow and usage of the centerpiece unit, Queen Bee, has consistently run at rates in excess of 90% of capacity, it was clear that the IBM P575 machines were declining significantly in their contribution to actual computing cycles. The IBM P575 units were also recognized as being significant power users and their failure/trouble rates have been increasing.
The continued monitoring and analysis of usage lead to action by the Management Council in February 2011 to direct staff to develop a plan to decommission not less than three of the five IBM P575 machines for consideration at the next LONI Management Council meeting. Staff proceeded to discuss this effort with the researchers at campuses to determine the impact and the value of this approach, and made recommendations at the July 2011 LONI Management Council meeting.

HPC discussions also involved the issue of the coming conclusion of the TeraGrid participation (an NSF sponsored program which uses high-performance network connections, integrates high-performance computers, data resources and tools, and high-end experimental facilities around the country) on the part of Queen Bee and the benefits and challenges that will result from that development. TeraGrid participation conclusion will mean that 50% of Queen Bee’s capacity will be returned to LONI users, which will more than offset the loss of capacity from decommissioning the IBM P575’s, but there will also be a loss of operational support when the TeraGrid grant funding terminates. This is now projected to happen March 31, 2012 when the entire TeraGrid program terminates.

Research/Grants and Special Projects/Activities
Significant work continued on several research and grant awards during FY2010-11 that had been secured based upon LONI resources and capabilities available to researchers. Major projects underway during FY2010-11 were:
- $20M Statewide NSF/EPSCoR RII in Materials Science
- $6M tri-state NSF/EPSCoR RII Track 2 in Coastal Studies
- $2M NSF ARI-R2 to advance LSU’s Data Network Infrastructure
- $1.2M NSF/EPSCoR RII C2 connects Xavier to LONI

The $20 million Statewide NSF/EPSCoR grant in Materials Science, known as LASiGMA, formed a highly focused statewide research consortium which capitalizes on intellectual talent, combines the pertinent elements developed under previous RII awards, and leverages the state-of-the-art Cyberinfrastructure (CI) that has recently become available through LONI investments to position Louisiana as a major hub of innovation in computational materials science. LA-SiGMA will create a statewide research and education program focusing on (1) electronic materials, (2) energy materials, and (3) biomolecular materials. Within the overall theme of “computational materials science,” these science drivers emerged as clear areas of strength through a statewide solicitation that yielded over forty multi-institutional whitepapers from teams of researchers. The majority of these teams included computational and experimental researchers, providing a strong foundation for the proposed research program that relies on close collaboration between theorists, computational scientists, and experimentalists. The Alliance capitalizes on the jurisdiction’s Cyberinfrastructure (CI) and past investments in experimental and computational materials science. Program objectives include: building the next generation of experimentally validated formalisms, algorithms, and codes for multiscale materials simulations; implementing them on present and next generation supercomputers; and educating the next generation of a highly skilled workforce of materials scientists and engineers. LA-SiGMA features comprehensive plans for diversity, education and workforce development, cyberinfrastructure, and external engagement. This project represents a major opportunity for a substantial component of the Louisiana research community to demonstrate that Louisiana can compete for and secure a federally funded research center of excellence in Louisiana.

LONI sponsored its now annual “LONI Technical Forum”, an opportunity for campus network and information services staff to hear presentations on latest technology developments and to exchange ideas and practices within the technology community.

LONI hosted a Global Knowledge Advanced IPv6 class which assisted campus technicians in their preparations for conversion from IPv4 to IPv6 standards.

LONI staff also was invited to participate in a Cyberinfrastructure conference sponsored by the Kentucky EPSCoR program. LONI staff also maintained participation in its national and regional networking community discussions and participated regularly on the Governor’s Broadband Advisory Council meetings.
Help Desk Annual Totals
45,993 Total Incidents – 27,119 Telephone Calls – 84% of Calls Resolved without Escalation

Method of Contact
Email – 12,961 • Telephone – 27,356
Footprints – 1,740 • Chat – 139 • Walk-Up – 3,853

Tech Talks/FTC Events

2011 Tech Talks
• Tech Talk: Overview of IPV6 and Introduction to mySTART. April 13, 2011
• Tech Talk: Secunia Corporate Inspector Overview. Jun 22, 2011
• Tech Talk: State of the Network August 11, 2011
• Tech Talk: Computer Security Overview September 27, 2011
• Tech Talk: Business Intelligence. October 14, 2011
• Tech Talk: IPControl Transition. November 30, 2011
• Tech Talk: LSUMail Migration Overview. December 7, 2011 and December 8, 2011

2011 Faculty Technology Center
• IT Support Open House. November 2, 2011
• Tech Talk: Adobe Workflows for iPad/eBook/Smart Phones. November 1, 2011
• Tech Talk: Adobe Acrobat 10 Professional. November 1, 2011
• Coffee Talk: Twitter as an Instructional Tool. November 1, 2011
• Coffee Talk: Professional Uses of Adobe Connect Web Conferencing. September 28, 2011

Graduate and Teaching Assistants Events
• Online Webinar Reduce the Trauma and Drama: Making Your Moodle Course Student Friendly. August 19, 2011
• Online Webinar So, You’re Teaching in a Multimedia classroom: Explore Tools and Techniques to Engage Your Students! September 1, 2011
• Online Webinar LSU’s Cultural Gumbo: Key Ingredients for Teaching at LSU (and Surviving Culture Shock! September 16, 2011
• Meet and Greet Fellow GTAs. October 19, 2011
• Online Webinar Can You Hear Me Now? Giving and Receiving Constructive Feedback. November 18, 2011
The inaugural TechPawLooza 2011: Discover! Learn! Engage! was held in the Royal Cotillion Ballroom on March 3, 2011. Approximately 600 attendees spent a wonderful afternoon discovering, learning, and engaging with one another in the technologies available to LSU. The ballroom came alive with the amazing, educational, and fun LSU faculty and research exhibits, games, and technology vendor presentations and demos. Many prizes were given away to students and presentation attendees. The first TechPawLooza digital poster contest allowed attendees to vote on their favorite posters in the competition; first and second place winners received Adobe CS5 Premium Edition. The Facebook contest allowed social media engagement with the event and a winner received a Samsung Focus phone.

TechPawLooza 2011: March 3, 2011

Enterprise Systems

In accordance with FITS (2011) Action Item 8.01, the University began the process of replacing its mission-critical enterprise systems. This past year the University administration worked with ITS to establish an Enterprise Task Force (ETF) comprised of the various non-ITS stakeholders who are responsible for the system processes and determine how our systems need to function.

Through the leadership of the ETF, Collegiate Project Services (CPS) was hired to conduct the necessary needs assessment and begin to make recommendations toward the replacement of our legacy enterprise systems. A full report is expected to be completed in 2012.

In support of this effort, UIS conducted a Managed Services Assessment to determine the impact if a third party vendor assumed the responsibility for the support, maintenance, and process assurance of LSU’s application portfolio through a multi-year contract. A variety of staffing scenarios were examined, with costs estimates for a 10 year period between $38-57 million.

Academic Systems Advances

While the overall enterprise architecture may change dramatically in the next few years, UIS does not stop meeting the evolving needs of the University’s academic mission. Significant progress was made toward developing and acquiring advanced academic IT resources in 2011:

- Implemented the next phase of the Comprehensive Academic Tracking System (CATS) in an effort to further enhance the tracking of a student’s academic progress. Requirements for this phase were identified by working with the University Registrar’s office after an evaluation of the University of Florida’s tracking system in an effort to identify additional areas that would benefit students here at LSU.

- Implemented Hobsons Connect for the Office of Undergraduate Admissions in an effort to effectively recruit prospective students and also provide the ability to communicate with them effectively and with the right information.

- Implemented an online admissions application (Hobsons ApplyYourself) for the Graduate School in an effort to optimize their day to day admissions processes.

- Implemented new admissions requirements changes for all applicants applying for the Fall 2012 term mandated by the Louisiana Board of Regents. Requirements were such that they should cause an increase in competitive applicants applying to the university.

- Implemented a Web application for the Office of Undergraduate Admissions that allows students the ability to view courses that could be taken at other universities and determine their transfer credit at LSU. The application is called Tiger Transfer Tables.

- Conducted alpha testing of LSU Moodle2.0 for deployment in 2012.

- Implemented a process (MyProxy) for the Office of the University Registrar that will allow students to authorize access to 3rd parties to view student specific information and, in the case of fee payment pay fees. Once given access, the 3rd party has the ability to view a student’s current classification, current and future course schedules, grades, addresses, student holds and their CATS (Comprehensive Academic Tracking System) status.

- Implemented a process for the Office of the University Registrar that enables students and administrators to submit and receive electronic transcripts using a 3rd party vendor, eScrip Safe via their email.

Business Systems Advances

In 2011, UIS completed the implementation of the university’s new Human Resources System (HRS). This full-featured, Web-enabled development replaced a 30+ year legacy application built on archaic database technology. HRS makes use of routing/workflow/electronic approvals and attachments to efficiently process employee forms and positions for university administration.

UIS continued its efforts to roll out SAS Business Intelligence to campus administrative units. In addition, UIS evaluated potential new BPM workflow solutions and made a recommendation to move away from our existing “employees only” Metastorm platform towards K2’s workflow product. UIS hopes to offer a campus-wide solution that will be more cost-effective. Acquisition of the new platform should take place in 2012.
Working with LSU’s Office of Communications and University Relations (OCUR), UIS began the deployment of Bedework to replace disparate University calendaring functions.

**Web Services Advances**

In October, the University launched its new portal environment called myLSU which will eventually replace the PAWS portal which is tied to the legacy enterprise infrastructure. The new myLSU portal is architected on CampusEAI’s Life Ray platform and like Moodle, will have the ability to be customized as needed to meeting the campus’s changing needs.

In continued partnership with the Office of Communications & University Relations, UIS deployed 20 new sites in the existing WCMS infrastructure in 2011. We also introduced WordPress as a second supported Web option for departments. OCUR & UIS offered a pilot program for WordPress sites in late 2010 and then began offering the campus the solution in April 2011. There are currently 9 live WordPress sites.

In addition, UIS is currently planning out a move towards a vended product solution with our existing load balancers in an effort to handle the governing of load for our high-volume services in an effort to replace home-grown developed applications which currently handle this functionality.

We are expanding our use of open source load testing software and solutions in an effort to ensure our infrastructure in place will successfully support the high-volume services offered to our user base.

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**myLSU**

In October, ITS worked with the Office of Communications and University Relations to launch the new myLSU portal. The new portal is built on CampusEAI Consortium’s Life Ray based myCampus platform. The portal has been designed to eventually replace PAWS, LSU’s homegrown portal built in the late 1990s to provide a Web interface for the University’s legacy enterprise systems.

The myLSU portal currently replicates the links and content available in PAWS, but goes further to function as a true Intranet for the campus community. Unlike in PAWS, myLSU communications may be targeted to specific audiences. The myLSU environment now includes iframes, Web services, document drop, RSS feeds, and graphics not available in the previous portal.

With the deployment of myLSU, the portal is poised to evolve in order to both respond to LSU’s changing needs and to incorporate whatever new technologies comprise the replacement of the legacy enterprise systems in the near future. With myLSU, LSU is ready to advance its systems.
• 98.3% of LSU student users (26,581 of 28,971) are enrolled in at least one course section that is active in Moodle.
• 65.2% of faculty members currently teaching a course (1,372 of 2,103) are actively using Moodle.
• 71.3% of undergraduate course offerings are active in Moodle. 17.9% of graduate level course offerings are in use*.
• 42.3% of all course sections offered at LSU and LSU Law School are actively being used in Moodle*.
• 29,862 unique student users logged in to Moodle during the Fall 2011 semester.

*Law school courses have been made unavailable, so statistics are lower than they should be.
The very first recommendation of the Flagship IT Strategy for LSU (2011) calls for “a solid foundation of IT infrastructure that is modern and kept up to date.” ITS’s University Network & Infrastructure (UNI) division continues to advance the University’s network to support research, teaching and learning, and the business processes of the campus. In 2011, UNI had the following successes:

- Installed new network gear for the $2M BIPAS project funded by the Nation Science Foundation’s Advanced Research Infrastructure (ARI) Grant. This included deployment of 70 new routers and switches as well as the installation of 15,650 feet of new fiber.
- Deployed a new firewall with significantly increased capacity. Moved from an institutional level to an enterprise level firewall.
- Worked toward IPv6 network readiness and participated in World IPv6 Day.
- Maintained over 2K wireless access points.
- Worked with LONI to increase available commercial Internet bandwidth on campus.
- Began the process of migrating institutional e-mail from the on-campus Exchange environment to the Microsoft Office 365 hosted solution.
- Deployed a back-up Internet service for business continuity purposes.
- Completed the power & cooling project which more than doubled the power available to Frey Computing Services Center.
- UNI will soon complete the BIPAS project. BIPAS stands for Bifurcated Infrastructure Promoting the Advance of Science and brings 1gig connectivity to the desktop and 10gig connectivity to the University’s research intensive buildings. On-demand connectivity increases will also be available to classrooms and labs as needed in the future.
Funding Sources FY10-11
$34,179,199

Fee Generated $15,559,515
State $10,469,284
Tech Fee $4,449,046
Sponsored $3,701,355
Salary & Benefits
$15,351,268

Supplies, software, maintenance, travel for ITS; Campus cellular charges; LOUIS subscriptions

Campus network equipment, servers, network switches for work orders

Hardware and software maintenance for mainframe environment and other central campus infrastructure

Payments to OTM for internet bandwidth, telephone trunks and lines

Cable locates, voice and data trouble ticket charges, generator maintenance

Expenditures FY10-11
$34,179,199