

How does the University System of Georgia stay on the cutting edge of technology?

A robust network infrastructure is essential for instruction and administration in higher education to accomplish these objectives:

- enhance the teaching and learning experience
- connect researchers to libraries and technology
- facilitate improved network management
- improve campus communications
- reduce costs and improve business administration processes



PeachNet is the statewide network that supports all University System of Georgia (USG) Information and Instructional Technology (IIT) efforts. It is the mission-critical foundation that connects all institutions to each other, the Georgia Public Library Service (GPLS), GALILEO (Georgia's Virtual Library), the Internet, *Internet2*, and other resources for instruction and administration.

CHALLENGES

One challenge for the Office of Information and Instructional Technology (OIIT) is to integrate instructional and administrative systems that must work together seamlessly across the system. PeachNet is the basis for the USG's Integrated Learning Environment (ILE), built from the following *enterprise applications*:

- **GeorgiaVIEW** (Vista Implementation Enterprise-Wide) is the USG's state-of-the-art *learning management system* that provides instructors and students with a comprehensive set of easy-to-use tools for designing and managing both web-based and face-to-face courses.
- **GALILEO** (GeorgiA Library LEarning Online) is the Georgia's Virtual Library that serves the USG, K-12 schools, public libraries, adult technical institutes and colleges, and some private colleges.
- **PeopleSoft** is the financial and human resource management solution for faculty and staff payroll, information, and benefits.
- **Banner** is the student and financial aid information system that handles data about admissions, registration, transfers, financial aid and HOPE, transcripts, housing, and other administrative functions.
- **Data Warehouse** is the data repository and reporting system that provides information essential for policy decisions and accountability.

The rapidly changing landscape of USG networking is shaped by the nature of the research, teaching, and service missions of higher education. Everyone wants and needs reliable access to instructional and administrative resources, other USG sites, and the Internet. PeachNet is the IIT foundation underpinning this landscape.

UNIVERSITY SYSTEM OF GEORGIA



SOLUTIONS

OIIT's goal is to continually extend communication and collaboration tools for USG faculty, students, and administrators. By evaluating and implementing technologies such as fiber optic cable, video, and Voice over Internet Protocol (VoIP), OIIT has identified new opportunities to leverage the infrastructure to provide more efficient, improved, and lower cost services for USG institutions in the past, now, and in the future.

Internet2 (www.internet2.edu) is the proprietary research network being developed by a consortium of universities, industry, and government.

Enterprise applications are software systems centrally supported and used across institutions and units in the USG.

A *learning management system* is a set of web-based tools for teaching, learning, communication, and class administration.

OUTCOMES AND BENEFITS

The following USG/OIIT projects and initiatives depend on PeachNet as the basis for connecting students and services, linking teachers and technology, promoting research, and implementing the initiatives of GALILEO:

- Connecting USG institutions to the National LambdaRail (NLR) and the Internet2 promotes research and interaction among academic communities and private sector technology companies. NLR provides a national infrastructure for research and experimentation in networking technologies and applications.
- The Security strategy includes development of comprehensive policies and security plans, the Security Intrusion Detection and Prevention Project, assessment services and audits, training for users and administrators, and assistance to GPLS.
- Telecommunications Services facilitate evaluation and implementation of videoconferencing, video-streaming, and other new telecommunications technologies such as VoIP.

WHAT'S NEXT

PeachNet supports a rich variety of voice, video, and data applications that augment learning, research, and collaboration on and off campuses. PeachNet's ongoing operations must continue along with development for technology advances and application upgrades.

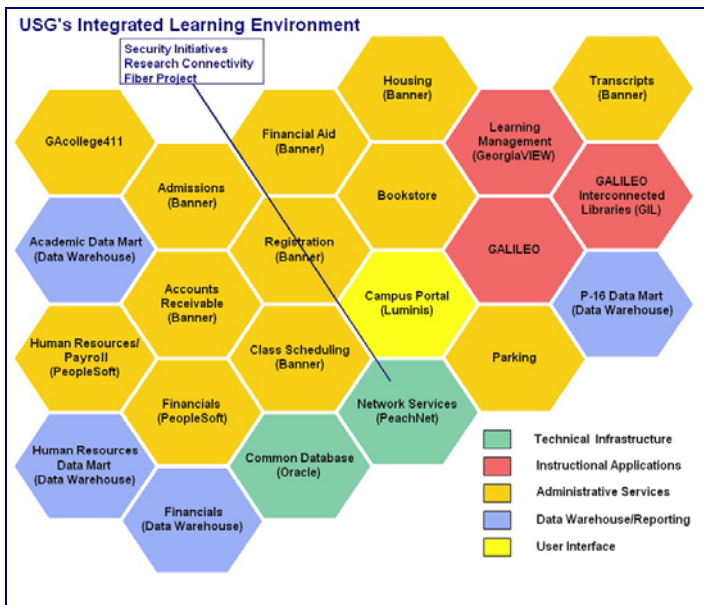
As an outgrowth of the increasing use of telecommunications services, the USG is implementing Quality of Service (QoS). QoS is a means of managing bandwidth by identifying categories of network traffic and assigning each category a priority and adequate bandwidth.

Closely related is protecting voice and video transmissions and improving the quality of telecommunications.

USG institutions are not islands of research, teaching, learning, and service; instead, they are part of a world that is increasingly interdependent, collaborative, and connected. OIIT is constantly adapting and improving to help the USG stay at the forefront of global higher education.

PEACHNET AND THE USG'S INTEGRATED LEARNING ENVIRONMENT (ILE)

PeachNet is the mission critical foundation that supports all information and instructional technology efforts for the University System of Georgia (USG) and the Georgia Public Library Service (GPLS). The graphic shows some of the instructional and administrative functions and enterprise technologies that must work together seamlessly in the ILE.



- Students must be recruited, admitted, and registered; they need access to books, e-mail, and the Internet; they must be able to take courses at multiple USG institutions and graduate.
- Students must receive financial aid and pay tuition, parking, and housing bills.
- Faculty and staff must have technological tools to teach, conduct research, and provide services.
- Those with visual, auditory, or motor impairments need full access to all on-line educational opportunities.
- Data for informed decision making and reporting must be collected.
- Technologies for learning in the classroom and online, and for accessing library resources and student services throughout the state from anywhere must be robust, reliable, and secure.
- Faculty and staff must be compensated and receive benefits.

