Georgia College & State University (GCSU) is a residential campus with approximately 6,200 students. The network infrastructure is logically separated into the campus network (CamNet) and the residence hall network (ResNet). The campus has a large wireless footprint covering all academic facilities, most administrative and outdoor property. The wireless network is positioned on ResNet so as to separate and limit our campus network’s (CamNet) risk. All management devices are on a digitally separate network as well.

RESNET & RESNET WIRELESS

The residence halls operate as a separate network from the campus network with connectivity between the two networks managed by a Cisco Pix firewall. ResNet is made up of 4100 hardwired 10/100 switched connections all on Cisco gear. ResNet’s wireless connectivity is available through 164 access points. Security for the access points is multi-layered. Authentication is achieved through a network management appliance requiring validated user id and password. All network addresses are on private IPs due to NATing throughout ResNet.

Clients on ResNet are encouraged to use the University provided Symantec anti-virus software. A Packeteer device shapes network traffic on ResNet to help ensure that University resources are available as the highest priority.

Network equipment in the residence halls resides in data closets secured by electronic locks and having only one point of egress. It has been an established agreement that network equipment is to be the sole resident in these equipment closets, where possible. Currently some closets are home to CATV, telephone, and other services. No redundant power source is in place in these locations.

CAMNET & CAMNET WIRELESS

The campus network’s core equipment is housed in the Lanier Hall core equipment room. This facility has one door secured by an electronic lock. The windows in this room are secured by bars and have a Kevlar coating to prevent breaking. This facility has its own cooling system, raised floor, emergency power shut off, fire suppression system (water), cameras, temperature and noise monitoring. The comprehensive UPS system to protect this room is remotely monitored 24X7. The back-up generator for longer-term outages is tested weekly and is monitored 24X7 as well.

A backup equipment facility has been created in a separate, adjacent building. This room is below grade and is secured by two locked doors. It is cooled by four self contained air conditioning units.

The CamNet itself has 5600 wired connections. Manufacturers primarily include Cisco, HP, and 3Com. The Cisco equipment on CamNet is on a management network and plans are for all future devices to be placed there as well. The wireless network on campus is made up of 218 access points manufactured by Cisco and Enterasys. The wireless network has been digitally placed on ResNet. All authentication and NATing is the same as that of the ResNet wireless.

Access to all closets is through electronic locked doors. Access to the main core equipment in Lanier Hall is strictly controlled by the Division of Information Technology (IT).
SERVERS

The Network & Systems Administration (NSA) manages all of the university’s enterprise application servers and supporting services.

The Web Enabled Resources Department (WER) manages several servers that are home to the university’s web presence, intranet, and Vista application.

The IT has undergone a recent change in strategy to consolidate servers and server locations. All IT maintained servers are housed in the Lanier Hall core equipment room or the backup core equipment room.

DESKTOP & LAPTOP COMPUTERS

TSS supports approximately 3100 laptop and desktop computers. Microsoft’s Active Directory (AD) and Altiris Client Management Suite are used for authentication and to aid in the day to day support of clients. Desktop users that have been migrated to AD have “user-level” access to clients and are not able to change machine configurations or install software. Laptop users who travel off campus also may have a local administrative account that will allow for connection to remote networks and the addition of home peripherals. Windows XP is the standard operating system on all desktops. Windows XP is the standard for laptops. Apple computers total 220 with OS X being the preferred operating system. All GCSU owned computers are required to maintain current patches, TSS approved anti-virus software, and current anti-virus signature files.

GCSU has an established standard desktop and laptop platform from which all new purchases are based. Deviation from that standard requires approval and justification of TSS and the Chief Information Officer (CIO).