

WGTC 1.9p

Equipment Specification and Lifecycle

West Georgia Technical College provides computer and peripheral systems to facilitate the support of research and education for its students and employees. The college will continually upgrade client workstations inventory to meet the current platform standards. The hardware upgrades and evolving minimum standards will ensure that the college keeps pace with industry standards for next generation software applications. Laptops and notebooks will become more widely used as technology matures, which, in turn, will generate increased demand for remote access services. Thin client or virtual systems may emerge as the college standard for desktop computing as terminal services mature and become a more cost-effective solution than local deployment of software applications.

Lifecycle

WGTC strives to utilize all equipment for its useful and intended purpose. Equipment needs may change, and the defined periods below could be subject to change as the needs of individual programs or of the college evolve. These lifecycles are only recommendations and are contingent upon funding.

- Computers: 5 years
- Laptops: 5 years (subject to equipment health)
- Network switches: 5 years
- Servers: 5 years

Minimum New PC Specification

To advance technology when focusing on personal computers, a certain standard must be set. Below is the specification for all new computer purchases. It is updated periodically to ensure that WGTC can support the latest software being used and/or taught. No computers will be purchased that do not meet this minimum specification. This will ensure that no new purchases will take a step back instead of forward.

If a project materializes that requires lesser machines, IT will work very hard to:

- Use existing computers from other areas to meet the requirements of the project
- Continue to shift computers from other areas to fill gaps caused by initial shift
- Purchase new PCs to be placed where they can be used to their greatest extent

This strategy provides the most value by providing upgrades to multiple areas with only one purchase. This strategy also ensures that technology is not wasted by placing over-specified machines when other areas could benefit from newer equipment.

- Intel i5 Processor
- 16GB RAM
- 500GB Storage
- Sound Card and Speakers
- 24" Flat Panel Widescreen Monitor
- Keyboard and Optical Mouse

Network Standard

WGTC has an extensive Local Area Network (LAN) that connects each of its campuses. MetroE and Gigabit Ethernet or subsequent standards will be applied in the design of WAN and LAN backbone connections. The standard will require a minimum 1 gigabit per second connections to all nodes using either copper or fiber. The network infrastructure will naturally evolve to higher bandwidth standards as media and supporting equipment become proven and economically feasible.

Cable Infrastructure

New and renovated facilities will be equipped with Category 6a Unshielded Twisted Pair or subsequent high-speed wire standards. Every classroom and administrative workspace will be provided with at least one outlet box per permanent structure wall. Each outlet will accommodate four 4-pair cables. Fiber drops are preferred for data, voice, and video services where high bandwidth applications are used. Fiber risers and backbone connections will be provided to telecommunications closets to enhance bandwidth. Star topology is the target architecture connecting remote buildings to the college's data centers for voice, data, and video communications.

LAN Protocols

The college will adopt MPLS, IPv4/IPv6, and/or other high bandwidth, quality of service protocols as evolving standards certifies them for use and common acceptance drives their price to affordable ranges. The availability of public service facilities will be closely monitored as infrastructure evolves to ensure that the adequate provisions are made for upgrade of the school wide area network at minimum cost.

Wide Area Network

With the current connections between campuses, the wide area network should be sufficient for some time to come, but the utilization of the lines will need to be monitored to ensure the lines are not reaching maximum capacity and allow of the planning of additional bandwidth as the college may require it.

Hardware and Software Implementation for Classrooms/Offices

Student instruction and learning outcomes are the driving force behind technology in the classroom or office. Technology resources should be allocated in such a way that will best serve

student learning and assist the instructor with the delivery of his/her curriculum or assist with support staff that regularly aid students.

Requests for new/upgrades technology in the classroom or offices (i.e. software, hardware) should be submitted via Helpdesk Support Request and should adhere to these guidelines:

- 1. Documentation on how this technology (software/hardware) will be implemented and how it will improve instructional delivery or student learning outcomes
- 2. List of technology (software/hardware) needed, along with estimated cost
- 3. List of needed technology is included in the Information Technology budget as well as in the Academic Affairs program equipment needs list

Once Information Technology reviews the request, it will be presented to Senior Leadership for approval.

Inventory

An inventory of computer equipment is maintained in two systems. The primary system for daily use is a Microsoft Access database. The second system is the "official" inventory system required by TCSG. This official system is part of the Business Office administrative system: PeopleSoft.

As new equipment is purchased and received, an inventory sheet from the Business Office is completed. The information on that sheet is entered into the local Access database, and the form is then forwarded to the Business Office. All computer installations, moves, and retirements are then tracked via the Access system. Monthly, a report indicating all the changes is generated and provided to the Business Office. This report is used to update the central system as required by the Technical College System of Georgia.

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