UNIVERSITY OF NORTH CAROLINA
School of Information & Library Science

Information Technology

Policy and Procedure Manual

Table of Contents

Introduction

This document provides the policies and procedures for the selection and use of information technology resources within the School of Information and Library Science (SILS). All SILS faculty and staff are expected to adhere to these policies. This document describes the purpose of individual policies and procedural steps related to their implementation. This policy currently focuses on desktop, laptop and server systems. Future policies may be developed to address other equipment including mobile devices.

In coordination with school leadership, the SILS Director of Information Technology will keep all IT policies current. This document will be reviewed every two years in order to best reflect broader changes in technology and changes in the School. Small modifications and amendments to this policy may happen as needed at the request of faculty or staff and with approval by the Dean of SILS. Please contact the Director of IT with any questions or concerns about the policy and procedures.

These policies are SILS-specific and do not replace or override official UNC information security policies and procedures that apply to the entire campus.

Desktop and Laptop Computers

Desktop and Laptop Computers: New Purchases

Policy Number: 001
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
Maximum efficiency, uptime and productivity is achieved by offering a fixed number of high performing, enterprise-ready desktop and laptop computer models. Standardization facilitates installation and maintenance, and minimizes the time and costs of repair and replacement.

Procedure
When using School funds, SILS will purchase new computers from a list of standard models that are approved and fully supported by SILS IT Services. When faculty request computers to be purchased using grants or other funds, they are also directed to select from the standard list whenever technically feasible.

The Director of IT is responsible for ordering and configuring new computers for SILS employees' use. The models currently recommended for purchase are:

> Dell OptiPlex (desktop)
> Lenovo ThinkPad (laptop)
> Apple MacBook Pro (laptop)
> If another brand or model of computer is required, please contact the Director of IT. For the best support, Lenovo laptops through the UNC CCI program and Dell OptiPlex desktops are strongly recommended.

Once a new computer arrives, SILS IT Services will document the purchase in order to track system ownership, configuration information, and dates for lifecycle replacement. SILS IT Services will load and configure any programs necessary, then contact the faculty or staff member via email to schedule deployment.

SILS IT Services-Funded Desktops and Laptops

Policy Number: 002
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy details the specific computing equipment that is paid for and provided to faculty and staff by the SILS IT Services group.

Procedure
Tenured and tenure-track faculty, Clinical Professors, Clinical Associate Professors, and SILS Lecturers will be offered their choice of either a single laptop or a single desktop computer. SILS staff members will be provided desktop systems, unless a laptop is approved by the Dean. The specific computer model will be selected from the standard list of types and configurations as established by SILS IT Services (see policy 001). Provision of computers for Research Scientists and Postdocs must be provided through grant funds or other sources.

SILS IT Services-Funded Printers

Policy Number: 003
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy seeks to provide reliable printing, copying and scanning services to SILS faculty and staff while controlling paper and printing-related costs. It is designed to support the on-going maintenance and support of these devices and to provide for the quick resolution of problems.

Procedure
SILS employees are encourage to use the lowest-cost option for their printing, copying and scanning needs. A school-wide multifunction copier is located in the SILS Office and offers the lowest per page costs available in the building. Additional shared black-and-white and color printers are centrally located in the SILS main offices and in the lower level.

Small capacity personal printers will be provided to faculty and staff members on an as-needed basis. These personal printers will be selected from currently supported models to help maintain toner cartridge compatibility over time.

Maintenance requests including replacing toner or technical support, should be directed to the SILS Help Desk via email at silshelp@unc.edu, phone by at (919) 962-8188, or in-person at the SILS Help Desk.

Printers are maintained in-place until the end of their functional life. The printer information, along with the location and faculty or staff owner information, will be recorded by SILS IT Services.

Faculty Startup-Funded Computers

Policy Number: 004
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy outlines the funding and technical support requirements for computers that faculty purchase with their startup funds. It establishes a total cost of ownership (TCO) charge that accompanies any new computer purchased with startup funds. This charge supports the on-going lifecycle and infrastructure support of the system by the SILS IT Services group.

Procedure
When purchasing a new computer with startup funds, faculty should contact the SILS Director of IT to select a new computer from the standard set of options and to discuss any additional software needs.

In addition to the purchase price for the equipment itself, each computer purchased with startup funds is subject to a total cost of ownership (TCO) support charge. This charge helps provide cradle to grave support for the systems and includes purchasing, setup, configuration, technical support, application and operating system updates, security and antivirus, inventory management, access controls, diagnostic support, repairs, custom scripting, enterprise client management support, and IT labor, training and operations. This up-front charge covers the lifespan of the system (3 or 5 years) at a rate of $250.00 per year. This amounts to $750 for laptop computers (covering a 3-year life cycle), and $1250.00 for desktop computers (covering a 5-year life cycle).

Computers purchased with startup funds will be documented, maintained, and supported on the same schedules as noted in policy 005. Once the computer reaches the 3-year threshold for laptops or the 5-year threshold for desktops, SILS IT Services will sent an email message to the faculty or staff member notifying him or her of the upcoming end of life for the system. Six months after the notification, the computer will be removed from service.

Note that Policy 004 (Faculty Startup-Funded Computers) applies to computers being used as individual workstations. For computers that will be used as servers, see Policy 014 (Research Computing Support: Server Provisioning).

Desktop and Laptop Computers: Replacement Schedule

Policy Number: 005
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy

This policy is to ensure that all desktop and laptop computers for faculty, staff, and students perform adequately for their intended purpose and continue to be easily managed and maintained by SILS IT Services.

Procedure

Faculty and staff computers will have a fixed replacement schedule. Subject to budget constraints, desktop computers funded by SILS IT Services will be replaced every five years and laptop computers every three years. Systems damaged beyond repair will be replaced as soon as possible. SILS IT Services will keep a record of the purchase date, warranty, and faculty or staff member using the computer to ensure all computers are inventoried and stay within their maintenance cycle.

New faculty hires will be contacted for their computer preference of a laptop or desktop computer prior to their start date. Current faculty members will be contacted regarding their preference prior to the life-cycle replacement date of their current computer.

Once the new computer arrives, SILS IT Services will document the purchase to track system ownership, configuration information, and dates for lifecycle replacement. SILS IT Services will configure and load any programs necessary -- see Policy 007 (Desktops and Laptops: Software Replacement Schedule) and Policy 008 (Desktops and Laptops: New Software Purchases) -- and then contact the faculty or staff member via email to arrange a time to exchange his/her current computer for the new computer.

The current computer must be returned to SILS IT Services before the new computer is deployed. The old computer will be kept for a period of at least one week before the hard drive is securely wiped and the system is sent to surplus or used for spare parts.

This policy applies to all desktop and laptop computers that are funded by SILS IT Services, grant funds or startup funds.

Desktop and Laptop Computers: Off-Site Desktop Computer Use

Policy Number: 006
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy

Desktop computers for use at home by faculty or staff must be adequately managed and supported to ensure proper functionality, information security controls, and to adhere to university policies and SILS computer replacement schedules.

Procedure

Faculty who require that a SILS-owned desktop computer be located at their personal residence, must fill out the Reporting University Equipment Movement On and Off Campus form once a year and deliver a signed copy to SILS IT Services. The form can be found online:
http://financepolicy.unc.edu/policy-procedure/603-equipment-inventory-and-reporting/603-4-reporting-university-equipment-movement-on-and-off-campus/

SILS IT Services will send email reminders to complete this form to SILS employees annually. SILS IT Services will keep a record of the computer purchase date, warranty, software licenses, and faculty member using the computer to ensure that all computers are inventoried and stay updated for the duration of the life-cycle.

Off-site desktop computers are under the same replacement schedule as covered in Policy 005 (Desktop and Laptop Computers: Replacement Schedule) and should be replaced every five years. A remote connection program may be placed on all off-site desktop computers to aid SILS IT Services in correcting any problems and installing any required software on the computer without the faculty member having to physically bring the computer to campus. However, there may be times when the faculty or staff member will need to physically bring the computer to Manning Hall for maintenance or repair.

Faculty are responsible for updates to the operating system, antivirus software, regular backups, sensitive data scanning and remediation, and maintenance of applications.

Desktops and Laptops: Software Replacement Schedule

Policy Number: 007
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy

To help provide for a secure and productive computing environment, desktop and laptop computers will be maintained with consistent and up-to-date versions of applications. This policy is designed to maintain complete compliance with software licensing terms, to promote security, and to standardize the process of purchasing and administering replacement software for desktop and laptop computers.

Procedure

Each SILS IT-provided desktop or laptop computer will have the following standard software as needed:

1. Microsoft Office (latest or penultimate version only)
2. Adobe Acrobat Pro (latest or penultimate version only)
3. A variety of free and open source applications
4. A variety of University-licensed applications such as antivirus and desktop management software
5. A UNC supported backup client as needed for backup and recovery operations

SILS IT Services will record software information and license terms with the School's computer inventory. Licensed software deployed on unused computers may be uninstalled or transferred to computers that are currently in use. Software that is no longer supported by the vendor or by SILS IT Services may be removed. Research lab computers will have no paid software licenses installed locally unless provided for by the research group. A complete and up-to-date record of software deployments and associated product keys and licensing terms, including the documentation of any installation, removal or transfer of software licenses will be maintained by SILS IT Services.

If any software beyond the standard software is needed, please see Policy 008 (Desktops and Laptops: New Software Purchases).

Desktops and Laptops: New Software Purchases

Policy Number: 008
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy

This policy standardizes the process of purchasing and administering new software for desktop and laptop computers for faculty and staff. It seeks to ensure that computers have consistent and up-to-date versions of applications and are in compliance with relevant software licensing terms.

Procedure

Each faculty and staff desktop or laptop computer provided by SILS IT Services will include a standard software set -- see Policy 007 (Desktops and Laptops: Software Replacement Schedule). Requests for additional software should be made to the SILS Director of IT via email. Additional paid software can be purchased by the SILS Director of IT or by the SILS Executive Assistant. Information on the exact product, version and number of licenses should be included in the email request, along with the full UNC chart field budget string for billing.

Once purchased, SILS IT Services will record the date, product key and version, license expiration dates, and funding source. Computer information and faculty name assigned to the software will also be recorded.

If software is purchased without contacting SILS IT services, faculty and staff should notify the Director of IT with the above software details so that the purchase may be recorded. If technical support for the software is needed the license number and other relevant support information is crucial for SILS IT Services to provide assistance.

A complete and up-to-date record of software deployments and associated product keys and licensing terms, including the documentation of any installation, removal or transfer of software licenses will be maintained by SILS IT Services.

Desktop and Laptop Computers: Backup Service

Policy Number: 009
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
To clarify which computers are backed up by SILS IT and describe the backup frequency and retention period.

Procedure
Every faculty and staff member is allotted a single client license for a backup service. Computers (both desktop and laptop) are backed up daily with a file retention period of 90 days. The default frequency of the system backup is daily but can be configured by the end-user. File restore operations can also be completed directly by the end user. Please contact the Director of IT with any questions concerning which computers are currently backup by the service. Individual arrangements may be made to backup additional computers; the faculty or staff member must provide separate funds to cover the cost of the additional backup service.

Equipment Checkout

Equipment Checkout

Policy Number: 010
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy establishes the process and procedure for all SILS students, faculty, and staff for checking out equipment, and it establishes the number of days the equipment is allowed to be checked out.

Procedure
Equipment may be checked out at the SILS IT Services Help Desk by students enrolled in a SILS program or individual course, and by SILS faculty and staff. SILS students, faculty and staff must present their UNC OneCard to check out equipment. Equipment may be borrowed for up to four days before reminder emails are sent. Daily overdue fines can be charged at the discretion of the SILS Help Desk Manager at a rate of 50 cents per day. If an item needs to be checkout for more than four days, it must be approved ahead of time by the SILS Help Desk Manager.

Research Computing Support: Grant-Funded Computers

Policy Number: 011

Version: 1.0

Created: 12/2015   Reviewed:3/2016

Purpose of Policy

This policy outlines the funding and support requirements for grant-funded computers. It establishes a total cost of ownership (TCO) charge that accompanies any new computers purchased with grant funds. This charge support the on-going lifecycle support of the system by the SILS IT Services group.

Procedure

When planning to purchase a new computer for grant-funded research, faculty or staff should include all technology expenses (computers, software, and any other devices) in the grant proposal budget. A sample checklist is available from the Contracts and Grants Administrator in the SILS main office.

In addition to the purchase price for the equipment itself, each grant-funded computer purchase is subject to a total cost of ownership (TCO) support charge. This charge helps provide cradle to grave support for the systems and includes purchasing, setup, configuration, technical support, application and operating system updates, security an antivirus, inventory management, access controls, diagnostic support, repairs, custom scripting, enterprise client management support, and IT labor, training and operations. This up-front charge covers the lifespan of the system (3 or 5 years) at a rate of $250.00 per year. This amounts to $750 for laptop computers (covering a 3-year life cycle), and $1250.00 for desktop computers (covering a 5-year life cycle).

Computers purchased with grant funds will be documented, maintained, and supported on the same schedules as noted in Policy 005 (Desktop and Laptop Computers: Replacement Schedule). Once the computer reaches the 3-year threshold for laptops or the 5-year threshold for desktops, SILS IT Services will send an email message to the faculty or staff member notifying him or her of the upcoming end of life for the system. Six months after the notification, the computer will be removed from service.

Note that Policy 011 (Research Computing Support: Grant-Funded Computers) applies to computers being used as individual workstations. For computers that will be used as servers, see Policy 014 (Research Computing Support: Server Provisioning).

Research Computing Support: Grant-Funded Software

Policy Number: 012
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
To describe funding and support practices for grant-funded software purchases.

Procedure
When planning to purchase software for grant-funded research, faculty must include an itemized list of all computer applications and services that will be required over the duration of the project. This should be included in the grant proposal. Software purchased with grant funds will be documented and supported on the same schedules as noted in Policy 007 (Desktops and Laptops: Software Replacement Schedule).

Research Computing Support: Backup Service

Policy Number: 013
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy describes the recommended practice for the backup and recovery options for grant-funded computers.

Procedure
Funding for backups must be written into the grant proposal budget. This includes backups for desktops, laptops and server systems. A sample grant proposal checklist is available from the Contracts and Grants Administrator in the SILS main office.

SILS IT Services will make a record of the backup instance and will install and configure the appropriate backup client software as needed to safeguard the data. Computers are backed up daily and have a 90-day retention policy. Please contact the Director of IT with any questions concerning which computers are currently backed up.

Research Computing Support: Server Provisioning

Policy Number: 014
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy

This policy outlines the School's recommendations for the support and administration of research computing servers. This policy helps ensure the reliability and security of server systems by implementing standard infrastructures that are in full compliance with University policy and that can be effectively managed by the SILS IT Services staff.

Procedure

When faculty or staff write grant proposals, they must include funds for any required servers in the proposal budget. Unless it is not technically feasible, the server should be specified as a virtual server administered by SILS and hosted by UNC ITS. A sample grant proposal checklist is available from the Contracts and Grants Administrator in the SILS main office.

Yearly fees for virtual servers are based on current pricing from UNC ITS.

In addition to the direct price for the equipment (or virtual server) itself, each research computer is also subject to a total cost of ownership (TCO) support charge. This charge helps provide cradle to grave support for the systems and includes purchasing, setup, configuration, technical support, application and operating system updates, security an antivirus, inventory management, access controls, diagnostic support, repairs, custom scripting, enterprise client management support, and IT labor, training and operations. This up-front charge is $250.00 per year.

Servers used for research computing will be documented, maintained, and supported on the same schedules as noted in Policy 005 (Desktop and Laptop Computers: Replacement Schedule). Research servers will only be administered and maintained for the duration that they are funded by the project budget (usually until the end date of the project) unless other specific funding provisions are provided for on-going support and administration. Before the termination of the project, SILS IT Services will sent an email message to the faculty or staff member who has budgetary authority for the grant, informing him/her of the date when support for the server will end. When funds are not budgeted for the server, it can be removed from service.

Information Security

Information Security: Adherence to UNC Information Security Policies

Policy Number: 015
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
To align with UNC security policies.

Procedure
All UNC faculty, staff, and students must adhere to all official UNC information security policies and procedures as they apply to campus. These policies are available at: http://help.unc.edu/help/information-security-policy-summaries/.

All SILS servers will be regularly scanned for security vulnerabilities. Vulnerabilities will be remediated in accordance with University information security policies. Desktop and laptop systems that view, process or store sensitive information (PHI, PII) will also be regularly scanned for vulnerabilities and remediated. Full drive encryption will be implemented on all laptops.

Information Security: Approved Use of Servers

Policy Number: 016
Version: 1.0
Created: 3/2016   Reviewed: 4/2016

Purpose of Policy
This policy seeks to provide better support for academic and research services that are provided by SILS server-class systems.

Procedure
Faculty who have established a server or are planning to establish a server must communicate their plans to the SILS IT Director. This includes third-party or cloud-hosted solutions and virtual servers.

Subject to budget constraints, SILS servers will be run under the standard server infrastructure used by the School. In cases when the existing infrastructure is not a technically feasible solution, SILS IT Services

will find other options to deliver the service while adhering to larger University information security policies.

The preferred operating system will be the current or penultimate release of Red Hat Enterprise Linux or the current or penultimate release of Microsoft Windows Server. Exceptions can be made for extenuating circumstances.

SILS IT has primary responsibility for the administration of SILS servers. Faculty, staff or students who require root- or administrator-level access to a server must complete the Systems Administration Initiative (SAI) training prior to being granted these privileges.

Information Security: Incident and Vulnerability Response

Policy Number: 017
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy informs faculty, staff, and students about security updates that may affect research projects, websites, servers, applications, and databases housed on SILS servers.

Procedure
Malware and vulnerability scans are run regularly by SILS to detect vulnerabilities in SILS-owned systems. If a vulnerability is discovered on a system, it may be subjected to updates or configuration changes which could affect the system's functions. Systems that have security issues that affect other applications or systems may be taken offline without the consent of the creators. SILS IT Services reserves the right to monitor the use of SILS systems and take actions to ensure the security, integrity, and availability of its information systems.

Hosting Services

SILS Hosting: Projects, Applications, Databases and Websites

Policy Number: 018
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy sets expectations for maintenance, storage, support, hosting and life-cycle for hosted projects created by faculty and students.

Procedure
Faculty, students and staff are strongly encouraged to meet with SILS IT Services before starting projects that require IT resources. The project owner and SILS IT will discuss the project's technology requirements and how they can be best matched with available resources. A project time-line must be specified at the outset of the project that includes an anticipated end-date. SILS IT Services will maintain a record of the project details and will send a courtesy email to the project owner at the conclusion of the project as a reminder of the project end of life and pending removal of the hosted instance.

Course & Classroom Technology

Course & Classroom Technology: Scheduling and Preparations

Policy Number: 019
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
This policy outlines the recommended practice to satisfactorily prepare course-specific and classroom-specific technology for faculty each semester.

Procedure
One month before the start of each semester the Director of IT will email SILS faculty and adjunct instructors requesting details on any technology needs for the coming semester. These technology needs could include software in the SILS Computer Lab (Manning 117), dedicated course servers, instructor applications, student technology needs, databases, websites, Virtual Lab applications, web

conferencing sessions and other technology needs. Faculty and adjunct instructors should respond with their requirements well before the start of the semester. New technology needs identified during the semester should be communicated to the Director of IT at least two weeks in advance.

If the computer lab (Manning 117) is needed for individual class sessions, faculty and instructors should contact the SILS IT Services Help Desk to schedule the dates and times.

Student Computing

Student Computing: Information Security

Policy Number: 020
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy
To inform students about security updates that may affect research projects, websites, servers, applications, and databases stored on SILS servers.

Procedure
Malware and vulnerability scans are run regularly by SILS to detect vulnerabilities in SILS-owned systems. If a vulnerability is discovered on a system, it may be subject to immediate updates or configuration changes which could affect the system's function. Systems that have security issues that affect other applications or systems may be taken offline without the consent of the creators. SILS IT Services reserves the right to monitor the use of SILS systems and take actions to ensure the security, integrity, and availability of its information systems.

Student Computing: Software

Policy Number: 021
Version: 1.0
Created: 12/2015   Reviewed: 4/2016

Purpose of Policy

To inform students which computers may run University purchased software.

Procedure

Software purchased by the university will only be installed on university-owned computers. This software cannot be installed on personal computers. Please see the Director of IT to determine whether the software can be provided by an alternative method.