Carnegie Mellon University
Student Affairs Technology Hardware Acquisition & Tracking Policy

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Contents

I.   Justification

Creating standard process and procedures in obtaining and tracking technology equipment will increase administrative efficiency and reduce the risk of equipment loss. Purchasing technology equipment in bulk can also provide a substantial financial savings. Standardizing on one (or close to one) equipment make and model will vastly increase the consistency and efficiency of which the devices are supported and maintained.

The purpose of this policy is to create standardized methods in managing technology hardware acquisition, disposal and inventory tracking throughout the entire Division of Student Affairs. Additionally, this policy shall define and promote the standard specifications of technology hardware used within the Division of Student Affairs.

II.   Technology Scope

This Policy covers all technology hardware purchased with DOSA Departmental or Divisional funds. This policy does not cover any technological devices leased or provided to DOSA from the Department of Computing Services or others. Additionally, this policy does not cover enterprise hardware or systems such as servers or networking devices.

Technology hardware covered under this policy is:

1. Laptops
2. Docking Stations
3. Desktop Computers
4. Monitors
5. Keyboards and Mice
6. Personal & Small Office Printers
7. Tablets

III.   User Audience

This policy applies to all DOSA staff. This includes full time and part time staff as well as student workers.

IV.   Standards

A. Hardware Standards

All hardware systems must meet the requirements below. Any hardware desired that does not meet the requirements listed below must go through the *Non-Standard Hardware Request Procedure* noted in Section V., F. below.

1) Computer hardware standards – The same make/model computer will be used for all deployments. All Computers shall be equipped with at least the below hardware or equivalent.
   a. Wi-Fi compatibility
   b. 14 inch display (laptops only)
   c. Docking station compatibility (laptops only)
   d. Intel based processor
   e. A 3 year standard warranty
2) Monitor hardware standards – All users will receive a single display with laptops and desktop deployments. The same make/model monitor will be used for all deployments.
3) Printer hardware standards – The same make/model printer(s) will be used for all deployments. Minimum Printer hardware specifications shall be
   a. Laser Style Printer
   b. 600 X 600 dpi
   c. Duplex Printing
   d. 27 pages per minute print speed
4) Keyboards & Mice standards – There are no specific standards for Keyboards and mice, however the same make/model will be used where possible.
5) Tablet hardware standards – Tablet specifications will be determined based on the use case of the tablet on an as needed basis. Please see the _Non-Standard Hardware Request Procedure_ noted in Section V., F. below.
6) Other hardware standards – Any hardware device that does not fall into one of the above categories will not have a predefined standard, but recommendations will be made on a case-by-case basis depending on the use of the hardware as well as available options.
7) Hardware Standards and makes/models used for each hardware type are reviewed and updated annually by the DOSA IT team.

B. Software Standards

All computers will be preloaded with the following.

1) The most up to date and stable version of the Windows Desktop Operating System.
   The standard "desktop software deployment" as determined by DOSA IT. This will include tools such as the most up to date Microsoft Office Suite, Anti-Virus Suite, Google Chrome, Firefox, Adobe Reader, etc.

*NOTE: Responsibility to track licensing for any client software that is installed on a computer is the responsibility of the department. Additionally, DOSA IT will advise on the purchase of new client software, but it is the responsibility of the

department to work with Procurement Services, the Computer Store, or an outside vendor to make the purchase.

C. Computer Refresh Cycle

All technology related hardware purchased through the Division of Student Affairs (DOSA) or a Department within DOSA, shall be refreshed on a fixed schedule based on the following key factors.
1.   Device Age
2.   Device Duty Cycle
3.   Device Type

All *staff computers* will be refreshed four years after the initial deployment. This is based off of the purchase date of the computer, not assignment date to an individual.

Department and Spare Computers will be evaluated annually for replacement starting at four years after initial deployment. All attempts will be made to refresh Department and Spare computers that are more than 5 years old. In some cases, these computers may be maintained for more than 5 years.

Each device removed from service ("refreshed") shall be evaluated by the Division of Student Affairs Information Technology Team (DOSA IT) to determine if the device shall be maintained as a functioning spare for the Division or if it will be recycled with the Department of Environmental Health and Safety (EH&S). Sale of hardware to an individual or organization is not permitted.

D. Monitor Replacement

Monitors do not fall into a standard refresh cycle; however, the following may be used to justify the replace of a monitor.

1) Physical damage to the monitor
2) Poor Screen resolution
3) Several dead pixels or lines in the monitors display
4) Incompatibility with a refreshed computer

E. Printer Refresh

Printers shall be evaluated for refresh five years after deployment and annually each refresh cycle after five years.

F. Peripheral Refresh

Peripheral devices can be refreshed along with any computer that is being refreshed upon request. If a request is not made, the existing peripheral devices may be reused with the new computer.

G. Tablet Refresh

Tablets will be refreshed on an as needed basis, but will not be refreshed any sooner than three years after deployment.

H. Other Hardware Refresh

Other Hardware devices that do not fall under the above categories will be evaluated at the time of purchase to determine the expected life cycle of the device and refresh date will be determined from that. This will typically be no less than three years and no more than five years

I. Departmental Computers

Departments may keep a supply of systems that are not assigned to a specific person within the department. Departmental Computers should fall under the following categories.

1. Student staff computers.
2. Devices that are centrally located and serve a specific task, such as running a media presentation on a television, checking in visitors or running a dedicated application.
3. Laptops that are shared for on call or travel outside of your normal office location
4. As emergency temporary replacements of critical systems in the event of a computer failure.

The number of Departmental computers kept for "emergency purposes" should not exceed one for every ten employees that would potentially need to utilize that system.

J. University Hardware Insurance

Hardware insurance will be purchased for all hardware valued over $1000 through CMU Insurance Services. See "Related Documentation" for more information on this program.

K. Divisional Spare Hardware

DOSA IT will keep a selection of spare hardware that is still functional after it has been refreshed. This hardware will be available to all DOSA staff members in the event that a piece of hardware fails unexpectedly or for special events or activities that might require extra hardware on a temporary basis.

Staff members may request the use of Spare hardware by following the *Spare Hardware Request* procedure in section V., D. below.

V.   Procedures

A. On-Cycle Hardware Refresh

Hardware that meets the *Computer Refresh Cycle* (Section IV. D. above) will be included automatically in the annual computer refresh process. Departments will be notified of intended hardware replacements prior to purchase.

B. On-Cycle Hardware Refresh Schedule

Hardware will be refreshed annually during the late fall time period. The schedule for the refresh of hardware will follow the steps below.

1) DOSA IT will complete annual review of vendor hardware that meets the hardware standards listed above. (2 weeks)
2) DOSA IT will examine the hardware inventory for each department to determine which systems qualify for a refresh (2-4 weeks)
3) DOSA IT will reach out to each departments Director or their Authorized Agent with a full list of devices that qualify for refresh to confirm accuracy. (1 week)
4) DOSA IT will take a final list of hardware to be refreshed from each department and compile it into a single list. This list will be provided to vendors to determine pricing. (3-4 weeks)
5) Once a vendor has been chosen, if applicable, DOSA IT will let the Department Director or their Authorized Agent know the final cost due from their department. (1 weeks)
6) The order will then be placed (2-4 weeks)
7) Once the Hardware has arrived, DOSA IT will record all relevant hardware information in the DOSA IT Inventory system. (1-2 weeks)
8) Hardware is then configured as necessary for its intended use. (4+ weeks)
9) Once all hardware is configured, time will be scheduled with staff members relevant to receiving the new hardware and returning old hardware. Old hardware will be taken for re-imaging or recycling. *NOTE: Any "departmental software" that was previously installed on a computer will need to be reinstalled during the transfer process. Each Department is responsible for notifying DOSA IT in these cases. This includes any software that requires a license. (4+ weeks)

C. Off-Cycle Hardware Refresh

In order for hardware to be refreshed off-cycle, the following steps must be taken.

1) If the device is covered under warranty, all attempts must be made to repair any issues with the hardware. DOSA IT and/or DSP can help facilitate the repair request with the manufacturer.
2) DOSA IT will check to see if suitable replacement hardware is available from the spare hardware pool. If a suitable replacement is available, the spare will go back into standard use by that staff member.
3) If none of the above criteria is applicable, the system will be replaced as quickly as possible pending budget approval.

D. Spare Hardware Request

Staff members may request additional hardware on a temporary basis when there is a specific short-term need such as an event, during a computer repair or replacement, etc. Follow the below steps to request spare hardware.

1) Submit a request to SAOIT@andrew.cmu.edu or via the web interface at http://itsupport.studentaffairs.cmu.edu
2) The request should contain the type of hardware you need, the quantity, the date you need the hardware, and the duration you will utilize the hardware. For requests that revolve around a repair of your current system, indicate a duration of unknown or upon return of the repaired hardware.
3) DOSA IT will find adequate spare hardware and bring it to you on the specified date. We will ensure you can get logged in and that there is no other setup required for you to function with the spare hardware.

E. Spare Hardware Setup

DOSA IT will make every effort to keep spare hardware in good working order to be available to DOSA staff members upon request. DOSA IT will use the below steps to identify and setup spare hardware.

1) When a piece of hardware is refreshed, DOSA IT or DSP will retrieve the old hardware. If the hardware will be re-used as a spare, the computer will be re-imaged and returned to DOSA IT. If not, it will be recycled through EH&S
2) Additionally, any spare hardware that has been in storage for two years or more will be reviewed and outdated systems will be recycled with EHS.

F. Non-standard Request

1. Special Needs

Staff members with special needs of any sort may request specialized hardware to help address that need. Ergonomic peripherals are the most common example of this, though this category is not limited to peripherals.

2. Multiple devices

Staff members that have gotten approval from their supervisor may request multiple devices. This can be a computer and a tablet, multiple monitors, two computers, or some other combination. Each system will follow its own refresh policy and anytime a device is refreshed, the need for the multiple systems will be re-evaluated to determine if it is still relevant. Each request will be handled on a case by case basis and final approval will be granted by a joint team of Department Director, Director of IT and Associated VP where necessary.

3. Customization

Staff members may request computers that exceed or do not meet the hardware and software standards listed above. Each request will be handled on a case by case basis and final approval will be granted by a joint team of Department Director, Director of IT and Associate Vice President where necessary.

When new "custom equipment" is requested, either during a scheduled refresh, a new hire for a new position, or when a need for hardware arises outside of the scheduled refresh, DOSA IT will recommend the standard hardware and software deployment for that hardware type. If the staff member or their supervisor does not believe that this will be sufficient, non-standard hardware can be requested. The below procedure outlines the process for requesting non-standard hardware.

1) The staff member or their supervisor must identify the specific need that the standard hardware specifications do not meet.
2) DOSA IT will evaluate the justification for the need and make recommendations based on the evaluation.
3) DOSA IT will discuss the request as well as their recommendation with the department Director or their Authorized Agent.
4) If DOSA IT and the department Director or their Authorized Agent approve the justification, the request will be approved and the hardware will be handled according to the appropriate ordering schedule. If the justification is not mutually approved, the custom equipment request will be forwarded to the relevant Associate Vice President for review.

G. Departures

When a staff member departs a position within DOSA, their equipment will be collected by DOSA IT to store unless the vacant position will be filled within 30 days or the equipment is allocated to a new user in that department.

H. New Hires

New hires that are filling an existing vacated position shall utilize the equipment the former staff member utilized. The refresh cycle is not affected by change of possession, as the refresh cycle is based on the original purchase date of the equipment.

New hires that are filling a newly created position shall be provided with standard hardware as defined above. Funding Source will be discussed prior to ordering new equipment.

I. Equipment Recycling

After refreshed hardware has been evaluated for use as spare hardware, all hardware that is deemed unusable as spare hardware will be sent to EH&S for recycling. Recycling will follow the standard EH&S procedure which includes hard drive destruction.

J. Inventory Management

DOSA IT will be responsible for tracking all relevant information (Serial number, purchase date, warranty expiration, etc...) of all hardware utilized by DOSA staff. DOSA IT will perform an annual review of the hardware to verify that the inventory is accurate.

Departmental Property Managers are responsible for letting DOSA IT know if any hardware is reassigned or relocated. This will assist in keeping the hardware inventory current.

VI. Definitions

Computer – A desktop or laptop system.

Custom Equipment – Computer or other equipment that does not meet the standard recommended hardware specification

Department Computer – a desktop or laptop that is assigned to a specific department for shared use between multiple staff OR is dedicated to a specific department use case or system (ex: check-in kiosk, digital signage player, credit card processing computer).

Duty Cycle – An average amount of use in hours per day

Hardware Asset Number – DOSA IT places a label on each piece of hardware we manage that includes a four to five digit number. The label also includes a barcode.

Life Cycle – The recommended duration hardware be utilized before it should be refreshed

On-Cycle Hardware– Hardware that has reached or exceeded its Life Cycle and is replaced during the annual refresh schedule.

Off-Cycle Hardware– Any replacement or refresh that does not meet the criteria for On-cycle.

Peripheral – Any piece of hardware utilized in conjunction with another piece of hardware. Common examples are mice, keyboards, and card readers.

Refresh – The replacement of hardware that has reached or exceeded its Life Cycle with a new piece of hardware.

Shared Computer – a desktop or laptop that is held in storage by DOSA IT for emergency or temporary use by staff throughout the Division. (ex: during warranty repair of Staff Computer, Temporary event, etc)

Staff Computer – a desktop or laptop that is assigned for use with a single staff person

Tablet – A touchscreen device using an operating system designed for mobile devices, typically with a screen at least 8 inches in size. IPad and Nexus devices fall into this category, but devices such as surface pro devices would not.

VII.   Compliance

All new employees shall be made aware of this policy during their onboarding phase.

VIII. Related Documentation

University Insurance Documentation – 'Memo for FY18 IPIP.PDF"

IX.   Revision History

Date	Reason for Change	Author
8/1/2017	Initial Draft Version	Joseph Turner
9/19/2017	Final Draft Version	Joel Tachoir
10/18/2017	Accepted Final Copy Ver. 1	Joel Tachoir