PURPOSE:
To describe a sustainable process for equipment end-of-life; and to clarify support structure, process and limitations for equipment that has reached its end of life, or is categorized as non-standard and/or consumer-grade equipment.

BACKGROUND:
The University currently supports a portfolio of more than 3900 active personal computers, including desktops, laptops, and tablet devices. In order to maintain a modern, reliable and secure computing environment for the campus and to ensure that CI students and employees have good working equipment to perform their daily assignments, it is necessary to regularly remove older computers from production and replace them with newer, more reliable computers. A regular refresh cycle reduces the burden of support by technicians in the Division of Technology & Innovation (T&I) for older, less-reliable, and increasingly non-standard equipment.

There are also instances where campus organizations may want to procure & use non-standard consumer-grade computer equipment. Establishment of a standard practice for how such equipment shall be supported by T&I helps ensure adequate support of standard equipment and makes efficient use of limited University resources.

BUSINESS PRACTICE:

Accountability:
Vice President for Technology & Innovation

Applicability:
All recipients of the following University-owned equipment: personal computers (including desktops, laptops and tablet devices); televisions; classroom or conference room audio/visual equipment (including projectors, switchers, amplifiers, speakers); and printers.

Definitions:
1. End-of-Life. A description of any University-owned computer equipment which has reached the end of its useful life for any one of the following reasons, including but not limited to:
   a. the original and extended warranty purchased for the equipment has expired
Business Practice for Equipment End-of-Life and Red-Tagging

2. **Red Tag.** A red-colored tag with a unique ID number (example pictured below) that is affixed to computer equipment when the equipment meets any one of the following criteria:
   a. The equipment has reached the End-of-Life and requires replacement.
   b. The equipment does not run a University standard computer operating system (OS) version.
   c. The equipment is not a University standard make or model.
   d. The equipment is being used by University students or employees, but the equipment was not purchased using University funds.

3. **Red-tagging**: the process of applying a Red Tag to University-owned or University-operated equipment (example below):

![Red Tag Example]

Text:

**General**

Each division receives funding from the University budget to support regular, timely refresh of computer equipment, and each division is expected to prioritize and manage the regular refresh of out-of-warranty and red-tagged computers using those funds at their discretion. T&I shall support each division by providing guidance and reporting on which computers, televisions, audio/visual equipment, and printers are the best candidates for refresh, i.e., those which are red-tagged and those which have expired warranties.

**Red-tagging personal computers (desktops, laptops, and tablets)**

Each personal computer purchased with University funds (both standard and custom configured computers, including desktops, laptops and mobile devices) shall be purchased with a corresponding 3 year warranty from the manufacturer.
Each computer purchased with University funds has a designated End of Life Date as part of its lifecycle (see Exhibits). At that time, the computers will be affixed with a “Red Tag” by T&I staff, and marked by the same T&I staff member in the T&I personal computer inventory as a “Red Tag” computer, in accordance with BP.03.009 Business Practice on Personal Computer Inventory (see Exhibits).

On a monthly basis, T&I user services staff shall:
1. review the inventory of computers which should be red-tagged
2. locate and affix Red Tags to computers which meet red-tagging criteria
3. update the T&I personal computer inventory to reflect red-tag status on computers which meet Red Tag criteria

Any computer marked with a Red Tag may continue to be used and operated by University employees and campus organizations as long as the computer meets all of the following standard criteria for operation:
- The computer is in working condition
- It is able to start up & login successfully to a working desktop
- It is running a current and supported operating system version
- It is receiving monthly security and operating system updates
- T&I staff are not requested to repair or support the red-tagged computer

If any of the criteria for operation are not met for the computer, the computer shall be immediately disconnected from the campus network and immediately delivered to T&I for decommission and disposal. T&I staff shall mark decommissioned red-tagged computers in the T&I personal computer inventory, in accordance with BP.03.009 Business Practice on Personal Computer Inventory (see Exhibits).

T&I staff shall not maintain, repair, or support red-tagged computers without advance written authorization from the Vice President for Technology & Innovation or designee.

On an annual basis, T&I shall provide a report to each division vice president with a list of computers assigned to employees within their division which have been red-tagged; or are scheduled to be red-tagged; or whose warranties have expired.
Business Practice for Equipment End-of-Life and Red-Tagging

Red-tagging of other equipment (including televisions, printers and audio visual equipment)

Non-standard, consumer-grade or other computer equipment deemed by T&I to be outside of the scope of its support shall be red-tagged by T&I in accordance with the End-of-Life Time Frame appropriate to that equipment (see Exhibits). Normal T&I support is available on CSUCI standard equipment until the end-of-life date is reached. T&I shall maintain a list of standard CSUCI computer equipment on the T&I web site (see Exhibits).

All equipment marked with a Red Tag may continue to be used by University employees and campus organizations as long as said equipment meets the basic criteria for operation (as outlined in the previous section). If any of the criteria for operation are not met, the equipment shall be immediately disconnected from the campus network.

T&I will arrange for the pickup of said equipment and will commence the decommissioning process which includes but is not limited to the following actions: mark decommissioned red-tagged equipment in an appropriate inventory, remove access to the decommissioned device, remove the device MAC address from appropriate firewall rules and access list, remove the device from all monitoring tools and enterprise management tools, remove the hard drive for degaussing, and make arrangements with the property clerk for final disposal.

T&I staff shall not maintain, repair, or support red-tagged equipment without advance written authorization from the Vice President for Technology & Innovation or designee.

Exhibits:

List of Equipment Lifecycles and End-of-Life Dates

<table>
<thead>
<tr>
<th>Device type</th>
<th>End-of-Life Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer (desktop, laptop or tablet)</td>
<td>5 years from date of purchase</td>
</tr>
<tr>
<td>Television</td>
<td>6 years from date of purchase</td>
</tr>
</tbody>
</table>
Business Practice for Equipment End-of-Life and Red-Tagging

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Role Assigned</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/V Equipment (Projectors, Switchers, Amplifiers, Speakers, etc.)</td>
<td>6 years from date of purchase (Limited support after manufacturer warranty expiration)</td>
<td>T&amp;I Manager of User Services</td>
<td>99/99/9999</td>
</tr>
<tr>
<td>Printers</td>
<td>5 years from date of purchase (Limited support after the limited one year manufacturer warranty expiration)</td>
<td>T&amp;I Manager of User Services</td>
<td>99/99/9999</td>
</tr>
</tbody>
</table>

List of Standard Computer Equipment

A list of standard computer equipment is available here: [https://www.csuci.edu/ti/purchasing/quotes.htm](https://www.csuci.edu/ti/purchasing/quotes.htm)

*These documents are incorporated by reference. Please consult the T&I Policy website for the latest versions:*
BP.03.009 Business Practice on Personal Computer Inventory: [https://www.csuci.edu/ti/policy/bp-03-009.htm](https://www.csuci.edu/ti/policy/bp-03-009.htm)

**Assessment Requirements**

Assessment requirements and history are listed in the grid below.

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Role Assigned</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>General review of this business practice</td>
<td>Annual</td>
<td>T&amp;I Manager of User Services</td>
<td>99/99/9999</td>
</tr>
<tr>
<td>Annual report of red tagged and out-of-warranty computers for each division</td>
<td>Annual</td>
<td>T&amp;I Manager of User Services</td>
<td>99/99/9999</td>
</tr>
</tbody>
</table>

**Revision History**

| BP Nbr: BP-03-012 | Enacted Date: 02/02/2017 | Revised By: NFisch | Revision Nbr: 001 | Revision Date: 02/02/2017 | Revised By: PMosinskis; HAquino | Revision Nbr: 002 | Revision Date: 11/13/2017 | Revised By: |