Standards of Technology Support

Summary
The Computing Services Group (CSG) provides information technology assistance, oversight and resources for the college’s teaching, research and outreach missions. By utilizing support standards, technical staff become experts on a targeted set of technical environments that meet the core needs of the college, thereby providing the most timely, efficient support. The levels of services are based on equipment type and configuration. In general, it uses this tier-based system:

<table>
<thead>
<tr>
<th>Highest Level</th>
<th>to</th>
<th>Lowest Level*</th>
</tr>
</thead>
<tbody>
<tr>
<td>College standard Dell computers; networked HP laser printers; Windows mobile and iPhone PDA devices</td>
<td>Apple computers using OS X on original Apple hardware; HP inkjet or all-in-one printers</td>
<td>Equipment that fills a unique college need incapable of being met by standard equipment variations</td>
</tr>
<tr>
<td>Equipment that fills a unique college need incapable of being met by standard equipment variations</td>
<td>Equipment that does not fall into other categories, including choices made for non-technical preference</td>
<td></td>
</tr>
</tbody>
</table>

*Variability of support is based on system compatibility with standard infrastructure

How to get support
Support is available between 8:00am and 4:30pm on regular college business days using the helpdesk at [http://www.human.cornell.edu/helpdesk/](http://www.human.cornell.edu/helpdesk/). Using this automated tool allows us to route issues to the most qualified technician, ensures high-priority tasks are identified, and creates a knowledge base of issues to make future service more efficient.

What equipment is supported
Support is provided for Cornell assets including items transferred into Cornell’s care by donation, grant or project transfers.

Types of Support
The majority of this document outlines the specific types of services the CSG can provide, including developing specifications for purchases, equipment maintenance, setup and disposal of equipment as well as on-demand support.

When does support end
The CSG provides support through an equipment's typical life expectancy. Equipment past this age tends to quickly require more resources to maintain.

Questions or Comments
Questions should be directed to Mary Miller, Manager of Desktop Support Services @ [mary.miller@cornell.edu](mailto:mary.miller@cornell.edu) or 5-6162.
Section 1 – General Support Information

Support Availability
Support is available between 8:00am and 4:30pm during regular college business days. Support requests initiated near the end of the business day may be delayed until the next business day.

How to Request Support
The college uses the University automated trouble ticket submission and tracking system, Remedy. Requests for support submitted through this system will provide confirmation emails to the requestor and will be automatically assigned to the correct support technician. Requests for support should follow these guidelines:

Routine Support
Routine support is for technology assistance that is not currently time sensitive, is not a serious impediment to work or that can be scheduled for assistance at a future time.

Request support using the helpdesk at http://www.human.cornell.edu/helpdesk/.

Emergency Support
This support is for issues that are immediately critical, affect a large portion of the community, or cause an inability to perform major work functions.

Request support using the helpdesk at http://www.human.cornell.edu/helpdesk/.
Follow up with a phone call to your support representative, Mary Miller (255-6162) or Randi Rainbow (255-8979).

Non-network connected locations
In locations where internet connectivity is not available or for network outages, call your support representative, Mary Miller (255-6162) or Randi Rainbow (255-8979) and a helpdesk ticket will be initiated for you.

Support Methods
The support staff has various methods of assisting with technology issues. The technician will usually choose the most expedient method of support, but a specific method can be requested. Options for support include:

In-Person – At equipment location
The support staff can provide service at the devices normal location. The support staff may only travel to Cornell owned or leased facilities to provide support.

In-Person – At CSG offices
Equipment can be brought to the CSG offices for support. If equipment is coming from a non-Cornell owned or leased facility, the equipment must be brought to campus by the user. CSG staff can assist with the movement of equipment only
as far as personal vehicles and can provide moving aids, such as equipment
dollies and carts for getting equipment to-and-from there.

**Over the phone support**
CSG technicians can provide assistance via telephone and in many cases, can
answer questions and address emergency concerns over the phone (see *How to
Request Support – emergency support*). Many staff members have cell phones
that answer to their Cornell extensions if they are away from the office during the
work day.

**Remote Access**
Equipment that is network aware can sometimes be managed by accessing
configuration tools available on the device. CSG technicians can, in many cases,
effect repairs of equipment utilizing these network resources.

**Supported Asset Identification**
The CSG can only provide assistance on equipment that can be identified as Cornell
assets and for software that was legally purchased or licensed. Verification must be
completed prior to support. Acceptable methods of identification include:

**Purchased Equipment**
Cornell ownership can be verified by providing purchase documentation or with
college asset tag markings on the device. Items verified by documentation will be
provided with Cornell asset tag markings.

**Transferred Assets**
Equipment transferred to Cornell from another institution requires documentation
of transfer. Once verified, it will be provided with Cornell asset tag markings.

**Software Validation**
Proof of licensing can include purchase receipts or original software media and
licensing codes.
Section 2 – Services and Equipment Types

Equipment Categories
Equipment categories are based on the services the CSG can provide for each.

All desktop support staff members are certified Dell technicians and therefore, the college recommends Dell equipment to ensure maximum compatibility with and support from college and university infrastructures, and the quickest support assistance.

Individuals may purchase equipment from any vendor, but are cautioned that not all platforms, configurations and manufacturers are compatible with university and college infrastructures and this can affect the support options available.

These categories are defined as follows:

College Standard
This category includes equipment that the CSG has a support infrastructure compatible with, has been tested with University and college systems, and is cost-effective and flexible enough to meet the majority of computing needs. This category of equipment current includes:
- Dell computers (Optiplex or Latitude) running Windows XP
- Networked HP laser printers
- Windows mobile and iPhone PDA devices

Macintosh
This category includes equipment produced by Apple and uses MacOS X.

Unique Need
Equipment that fills a unique need in the college where college standard equipment is unable to meet the functional requirement. This usually applies to specialty lab or research equipment, but could apply to desktop or laptop equipment purchased as part of a specific system that is under support directly by a vendor or is required for compatibility with equipment supplied by a vendor. User preferences such as computer weight, screen size or color are not functional characteristics that qualify as a unique need.

Other
This category includes equipment that does not fall into the categories above.

Services
The following are the services provided by the CSG. See Service Tables 1-3 for services by category.

Technology Consulting – Assisting in identifying a device or service that meets a functional need. Providing research and answering questions on platform compatibility, known issues, community reviews, and other options.
Equipment Procurement – Finding vendors and the best pricing to the Cornell community, determining warranty availability, and coordinating the purchase process.

Inventory Management – Identifying, tagging and maintaining inventory of computer assets, determining age and warranty status and providing reports of equipment, estimated replacement costs and assisting with University agencies when there are loss or theft issues.

Network Configuration and Maintenance – Configuring equipment to connect to Cornell’s wired networks in college buildings, Cornell’s RedRover wireless network, and configuring Cornell networks to accept these devices.

Understanding Technology – Assisting in understanding the functionality of new devices such as biometric security devices, or how to keep a device updated with patches.

Cornell Applications Setup and Maintenance – Installing and configuring Cornell provided services, such as Outlook email, the Bear Access suite (which includes a number of Cornell specific applications), or Oracle Calendar.

Support Consulting – Providing assistance in finding internet resources for self-supporting a device, such as online FAQs, documentation, or vendor support contacts.

Equipment Disposal – Providing safe, secure and ecologically friendly disposal of outdated equipment. Also, ensuring no residual information exists on the device when it is disposed of.

Imaging (Disk Cloning) – Fast-track set up and configuring of new computers based on predefined master images. Also, in the event of catastrophic operating system or hard drive failure replacing the base configuration quickly and efficiently.

Warranty Support – Managing the warranty replacement of computers and printers based on the terms of the service contract. Usually including shipping and receiving replacement items and coordinating work with company technicians.

Remote Managed Software – Installing or updating operating system or major applications through college managed automated services. These updates can be timed to happen at night or when the computer first logs in.
Remote Desktop Assistance – Connecting remotely to computer assets to troubleshoot, provide assistance and make minor repairs. This is usually in conjunction with telephonic support.

System Security Configuration – Maintaining security patches, configurations and access controls to ensure a safe computing environment. Includes installing antivirus and malware protection on the computer to provide proactive security.

Environmental Security Management – Providing a secure electronic network infrastructure that prevents unauthorized access to online resources by utilizing firewall, routing, network activity monitoring and DMZ quarantining.

System Setup and Restoration – Setting up systems in compliance with Cornell standards, installing vendor required patches, updating device drivers and other non-business specific initial configurations. Includes restoration in case of system failure.

Managed Anti-Virus Services – Installing and managing services to provide proactive anti-virus protection including centralized updates, reporting and emergency response updates.

Vendor Application Setup and Maintenance – Installing and configuring business required applications needed for Cornell business. Freeware or as-is shareware applications are not supported.

Equipment Management and Service
The way in which equipment is managed affects the level of services that are available. Unless discussed prior to the arrival of the equipment, new systems will automatically be configured as CSG Managed Equipment.

CSG Managed Equipment – The equipment will be configured in the safest, securest configuration that allows the necessary day-to-day functionality. This usually precludes the primary user from installing software, drivers or making major system changes. In this configuration, the CSG will provide the most comprehensive support for the computer. Unique need support could be adjusted based on equipment and infrastructure capability.

Self-Managed Equipment – This category includes all equipment not managed by the CSG. In this configuration, the owner assumes the responsibility to secure the computer, prevent any system issues that might affect the larger network or computing environment, and prevent the exposure of stored information to unauthorized individuals. In this configuration, the equipment, even if otherwise in another category, is supported as Other.
## Service Support Availability by Category - Computers

<table>
<thead>
<tr>
<th>Service</th>
<th>CSG Managed College Std</th>
<th>CSG Managed Macintosh</th>
<th>CSG Managed Unique Need</th>
<th>Self-Managed or Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornell Application Setup &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Environment Security Mgmt</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equipment Disposal</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equipment Procurement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Imaging (Disk Cloning)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Inventory Management</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Managed Anti-Virus Services</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Managed Software Updates</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Network Config &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Remote Desktop Assistance</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Remote Software Installation</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Support Consulting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>System Security Mgmt</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>System Setup &amp; Recovery</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Technical Consulting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Understanding Technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Vendor Application Setup &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Warranty Support</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
**Service Support Availability by Category – Technology Peripherals**

<table>
<thead>
<tr>
<th>Category</th>
<th>CSG Managed College Std</th>
<th>CSG Managed Macintosh</th>
<th>CSG Managed Unique Need</th>
<th>Self-Managed or Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornell Application Setup &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Environment Security Mgmt</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equipment Disposal</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equipment Procurement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Network Config &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Support Consulting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>System Setup &amp; Recovery</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td><strong>No</strong></td>
</tr>
<tr>
<td>Technical Consulting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Understanding Technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Vendor Application Setup &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td><strong>No</strong></td>
</tr>
<tr>
<td>Warranty Support</td>
<td>Yes</td>
<td><strong>No</strong></td>
<td>Yes</td>
<td><strong>No</strong></td>
</tr>
</tbody>
</table>

**Service Support Availability by Category – PDA (Personal Digital Assistant)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Windows Mobile</th>
<th>iPhone</th>
<th>Unique Need</th>
<th>Self Managed or Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornell Application Setup &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Environment Security Mgmt</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equipment Disposal</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Network Config &amp; Maint</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Support Consulting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Technical Consulting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Understanding Technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td><strong>No</strong></td>
</tr>
</tbody>
</table>
Section 3 – Support Limitations

Transferred Assets
The CSG will attempt to provide support for technology assets transferred to Cornell from another institution or by donation. However, the equipment must start in a working condition and needs to be configured in a manner compatible with Human Ecology infrastructure and security standards. CSG staff can undertake to convert equipment to this configuration with the user’s approval. If the equipment cannot be converted, support cannot be provided.

Used Equipment
Used or refurbished equipment will be supported only after review by the CSG for serviceability and life expectancy and may receive only limited support.

Self-Initiated Purchases
Computer equipment purchased without prior review by the CSG is not guaranteed support.

End of Support
The CSG provides support for equipment and systems for the length of their typical business life expectancy. Equipment past this age is not supported. These guidelines are:

- Computer equipment must be less than 6 years old, as identified by the manufacturer’s markings.
- Computer peripherals will be supported for the length of their manufacturer’s warranty.
- Mobile devices must be less than 3 years old, as identified by the manufacturer’s markings.