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General Policy for the Computer Support Group

Overview

The [Computer Support Group](#) (CSG) of the [Division of Mathematical Sciences](#) supports a variety of hardware, software, facilities, and network services. CSG augments the support offering of the centrally provide IT provider ITS. CSG is the Division's one stop shop for IT questions. CSG will facilitate central IT issues and questions for our users.

This document defines the policies of the [Computer Support Group](#) (CSG) of the [Division of Mathematical Sciences](#), the Departments of [Computer Science](#), [Mathematics](#), and [Statistics and Actuarial Science](#) at [The University of Iowa](#) regarding computing facilities and information technologies. All information herein is to be used as a guideline; specific interpretation of this policy is left to the Director of the Computer Support Group.

CSG Defined Support

Due to staffing, efficiency and budgetary limitations, the [CSG](#) must prioritize and standardize its support of hardware, operating systems and software which must be located within MacLean or Schaeffer Hall.

Support

- These are the guiding principles (the order is significant) under which the [CSG](#) operates:
- The primary responsibility of the CSG is to support core network services like file services, email, printing, user accounts, authentication, core applications and maintain a secure environment for computing.
- Support education including account creation, course software, course accounts, mailing lists, student labs and educational software.
- Support faculty, staff and TA/RA workstations in the [Division of Mathematical Sciences](#) that use the CSG approved operating systems, and to support commonly-used educational and research software running on those systems.
- Support research computing. The priority of research computing is determined by the time CSG has left and direction from the department chairs.

Operating Systems

- The CSG will provide full support to the following operating systems in CSG managed load machines:
 - Approved versions of the Red Hat Linux Enterprise Workstation running on CSG approved hardware. See the [Linux Managed Machine SLA](#) for support details.
 - Approved versions of Microsoft Windows XP on CSG approved hardware. See the [Windows Managed Machine SLA](#) or [Laptop Support SLA](#) for support details.
- File, print and email support of Macintosh OS.
- File, print and email support on all other OS's on an as time allows basis.

- The CSG does not have the resources in terms of time, training, or dollars to support other operating systems. We will attempt to help answer questions based upon our knowledge but will not support other operating systems.
- The CSG has a [self managed machine checklist](#) that should be consulted before requesting a self managed machine. There are several University policies that the user must adhere to when managing their own machine. This document also has answers to commonly asked configuration questions.

Hardware and Software Purchasing

Because the [CSG](#) manages computer and network equipment for the [Division](#), the CSG needs to be involved in the decision to purchase such equipment. The following items need to be considered when purchasing equipment:

- **Lab Refresh**
The CSG group tries to refresh each of its student labs once every three years. The student computer labs are funded with money from the student computer fees that the CSG applies for on a recurring basis.
- **CSG Support**
The CSG can not prohibit the purchase of hardware or software that it does not support, but the CSG discourages such purchases. CSG realizes that there may be very good reasons for the purchase of unsupported products, and will try to work with faculty and staff who do purchase such products. But the CSG cannot offer help for such purchases at the same level as for officially supported equipment and software.
- **Commercial Support**
The CSG strongly recommends that no product be purchased without also buying a support contract for that product. The CSG does not purchase vendor or manufacturer support for any hardware or software that it does not buy. It is the responsibility of the purchaser of the equipment to arrange for any necessary support contracts with the vendor or manufacturer.
- **Product Capability**
The CSG should be consulted in any purchase decision so that it can offer advice about the potential performance of the product. For hardware purchases, for example, the CSG will offer advice as to the amount of memory or local disk space that should be purchased.
- **Security**
The CSG strongly discourages the purchase and use of any product that potentially creates a security risk for the users within the Division.
- **File Server and Backup Capacity**
The purchase of hardware and software can place demands on the disk space on the central file server, and on the server backup system. The CSG may require that additional disk or backup capacity for the server be purchased along with a hardware or software purchase. The CSG may ask the purchaser to pay for the additional disk or backup capacity.

- **Network Capacity**
Some products may place extraordinary demands on the Division's network. In such cases, the CSG must plan for these demands, and must cooperate with [Information Technology Services](#) (ITS) to meet them. Network-intensive purchases may also require the purchase of network equipment, for which the CSG may ask the purchaser to pay.
- **Facilities Services Issues**
A purchased product may have special needs for air conditioning, electrical power, or other facilities services. The CSG must be notified as early as possible of these needs, so that it can cooperate with the [Facilities Services Group](#) in providing for them. The CSG may ask the purchaser to pay for the additional Facilities fees.

CSG Support Restrictions

- The [CSG](#) supports several hardware platforms, with certain restrictions. To have a supported machine, the configuration must be approved by the CSG **BEFORE THE EQUIPMENT IS ORDERED**. There are too many combinations and peripherals for PC's for the CSG to support every combination or for us to list the "currently" supported combinations. The CSG will work hard to support mainstream combinations of video, Ethernet, mouse and sound cards. If the equipment is ordered without being approved by the CSG, we reserve the right not to support it. This applies to both initial purchases as well as upgrades.
- **Vendor and Manufacturer Support**
The CSG will keep the hardware it manages in good working order to the best of our abilities. CSG will cooperate with external support groups on- and off-campus to resolve hardware problems
- The [CSG](#) does not purchase or manage vendor or manufacturer support or support contracts for supported platforms. It is the responsibility of the purchaser of the equipment to arrange for any necessary support contracts with the vendor or manufacturer.
- **Hardware Upgrades**
The CSG will identify upgrades to the hardware that supports the central infrastructure providing core file, print, web services, and backup and recovery services.
- **Network Connectivity**
The CSG will ensure that supported networked equipment has a usable network connection and provide a network name and address for unsupported hardware. CSG will cooperate with on-campus units (ITS) to maintain network functionality, though CSG does not have any control of the network, network reliability, or network performance. ITS has administrative domain over all the networks CSG is using. ITS can and will disable network ports that ITS deems a security risk due to violations in the ITS acceptable use policy. The CSG reserves the right to not provide network services for unsupported hardware if that hardware is deemed a security risk by the CSG.
- CSG is not responsible for new, existing or on going charges of the network connections. Each department picks those items up separately.
- **User-Installed Network Connections**
Users must not install any hardware on any network supported by the CSG without first consulting with the CSG. Improperly installed or configured equipment can make the

entire network unusable for everyone. Such equipment can also be a potential security risk. Any user who installs equipment on any network for the purpose of circumventing security will face disciplinary action and or account/port deactivation.

- **Standard Backups**

The CSG will back up the main file server only, so that files can be restored in the event of equipment failure or accidental loss by the user. Requests for restores will be prioritized based upon CSG support priorities. Abuse of restores by users may result in this service being terminated for that user. Backups will span a 12 week window. **No client back ups will be done by CSG. Please store all of your data on the file server ONLY.**

- **Backups for researchers**

The CSG can be contracted to backup research machines. The CSG will do some cost recovery for these services (\$.50 cents per gigabyte backed up) since some of our budget and salaries comes from student computer fees. There are three types of backups available to choose from based upon the level of protection you require: Fulls, incremental 1 (approximately monthly), incremental 2 (approximately weekly):

- Full backups are done 3 times a year, approximately at each semester beginning with NO incremental daily backups. Retention policy of 52 weeks.
- Incremental 1 backups have fulls done at the start of every month and daily incrementals. This backup will also backup incremental changes made since the last monthly full once per day. Retention policy of eight weeks.
- Incremental 2 backups have weekly full backups and backups incremental changes daily. Retention policy of eight weeks.

Assuming you have a 500Gb data set and you choose the Incremental 1 option would result in the following charge of $500\text{Gb} * \$0.50 * 12\text{month} = \3000 for the fulls for the year. Assuming a 1% change of data per day $500\text{Gb} * .01 * 30\text{days} * 12\text{months} * \$0.50 = \$900$. For a total of \$3900/year for backing up a 500gb data set with monthly fulls and daily incrementals.

- **Superuser Access**

The [CSG](#) will fully support equipment if, and only if, the CSG is the only party to have superuser (root) access, or the equivalent, on that equipment. The CSG cannot be responsible for the state of equipment for which it does not have sole and complete administrative access. The CSG reserves the right to not provide network services for unsupported hardware if that hardware is deemed a security risk by the CSG. There is a more limited support offering for shared root machines that can be found in the [CSG Linux Support Policy](#) document.

- **Hardware Obsolescence**

CSG will only support supported hardware for the duration of the life of support offered by the hardware vendor. CSG reserves the right to change its support of hardware at any time with 90 day notice to faculty and staff due to staffing resources, cost, and security needs.

- **Off-site Equipment**

The CSG does not have the resources to support equipment off-site. Equipment located off-campus will not be supported at all. Equipment at on-campus locations other than

MacLean or Schaeffer Hall will have low-priority support, if it falls into one of the supported categories outlined above.

- **Laptops**

The CSG has limited support for laptops as defined in our [Laptop Support SLA](#) document.

Software Support

The [CSG](#) will install and upgrade legally obtained and licensed educational, research, and productivity software for supported platforms according to our priorities defined earlier. The CSG will work with vendors to solve problems regarding installed software.

Software Funding

- Software typically has two components of cost:
 1. capital purchases
 2. annual maintenance costs
 - CSG will only purchase academic software and annual maintenance costs approved by the computer advisor committee (the three departmental DEO's or designates and the Director of the CSG). Furthermore, not all software requests will automatically be granted. CSG typically has a three year recurring support allocation from the student computer fees that is used to fund these software purchases. CSG, in consultation with the computer advisor committee, holds back a pre-determined amount of money for software used for academic courses. CSG facilitates the license negotiation and will install, maintain, and support the software.
 - When there is a differential cost between an educational version and research version of a software package, the CSG and departmental contributions will be calculated based on the cost of the educational version. Departments and researchers interested in the research version must cover the purchase and annual cost differential or the entire cost if not used for academic work.

Software Request Guidelines

There are several guidelines CSG uses when considering a software request.

1. Purchased software used in academic courses or in research.
2. Software license agreement must be approved by the U of I legal team before CSG can load the software on departmental workstations. If the software isn't approved, then the departments DEO must sign off on the installation and subsequent liability.
3. Installation media can be checked out to users in accordance with the University licensing requirements for that software title. See [ITS's software](#) licensing site for additional details.
4. University licensed software. This would include site licensed software like Microsoft Office, Windows XP, etc. See [ITS's software](#) licensing site for additional details.

5. Public domain software used for research or academic courses.

All software requests should be submitted to the CSG ticketing system located at request@divms.uiowa.edu. All requests for new software or for upgrades to existing software must be approved by the computer advisory committee. If the computer advisory committee approves the request the CSG will install the software based upon the following criteria:

1. All requests for research software will be installed by the CSG on a priority basis. CSG will place a priority on maintaining core network services first, completing the academic software requests second, and installing research specific software packages third.
2. Requests will be handled on a first come first serve basis.
3. For software that will be used in the fall semester, the cut off date is July 15th. The computer advisory committee will have all requests to the CSG by August 1st.
4. For software that will be used in the spring semester, the cut off date is November 15th. The computer advisory committee will have all requests to the CSG by December 1st.
5. For software that will be used in the summer semester, the cut off date is May 1st. The computer advisory committee will have all requests to the CSG by May 15th.

Any academic software requests submitted to CSG after the dates above will be installed as time allows and will not be guaranteed by the CSG to be ready for use at the start of the semester. CSG requires four weeks notice by the computer advisor committee to ensure the software meets the Software Eligibility Guidelines.

Printing & Supplies

- The [CSG](#) will provide toner cartridges for on-site, CSG managed, network-shared printers.
- Personal faculty and staff purchased printers will not be supplied (toner or paper) by the CSG. The departments or the faculty member will provide supplies to those printers.
- Laboratories that are funded from the [College of Liberal Arts](#) computer fees have no funding for printer paper. Thus, paper for these laboratories must be provided by the users. The amount of toner provided for these laboratories by the CSG will be determined by budgetary constraints.

Software Eligibility Guidelines

In order to maintain a secure and productive computer environment, software must meet the following guidelines to qualify for a network install.

1. Annual maintenance must be purchased for all commercial software. Annual maintenance must include phone support.
2. Software must be able to run as an ordinary user (i.e., not as a Power user or Administrator) and is not a security risk.
3. Software must support network licensing and must be able to be run from any machine on the CSG network unless prior approval is arranged with the CSG staff.
4. Enough licenses must be purchased to adequately support the class (or classes) in which the software will be used. CSG recommends purchasing a number equal to at least 20%-25% of the maximum number of students in the class (or classes) or a number equal to the number of seats in the B5 MLH computer lab.
5. The department(s) funding the software is responsible for any reporting requirements (e.g., Ansys requires an annual usage report). CSG will handle any reporting requirements of academic software usage if required.
6. The software must not conflict with existing applications or underlying operations of the host operating system.
7. Software license agreement must be approved by the U of I legal department.

If a purchased package does not meet these guidelines, CSG will not install it on the network. However, the software may be installed on an individual faculty machine or in a research lab depending on the circumstances.

Guidelines for Software Removal

The CSG recommends a one-year notification period prior to removing software from the system. This notification time period would allow CSG and the supporting departments to communicate the status of the software through a variety of mechanisms (e.g., newsletter, application wrapper, faculty meetings).

Annual software maintenance contracts must continue to be funded by the departments during the notification period.

Software that remains on the removal list following the one-year notification period will be removed from lab, classroom, and other public workstations prior to the start of fall classes. In addition, CSG cannot maintain retired software that remains on individual faculty or research machines. It is especially likely that new OS loads will render retired software inoperable.

Facilities Support

The [CSG](#) provides the following support for facilities in the [Division](#):

Laboratory Access

The [CSG](#) controls or coordinates access to the laboratories that it manages, via a door security system or through the Key Shop, as follows:

- Faculty and staff for relevant departments have access to general departmental laboratories until sometime after they end their employment with the [University](#).
- Undergraduate students majoring within the [Division](#) have access to the general educational laboratories provided by the major department; graduate students majoring within the Division have access to these laboratories, and to any general research laboratories within their major department. Access for a major within the Division will expire shortly after the student graduates.
- Instructors who would like their students to have access to a laboratory may request access for their students. Such access will expire at the end of the current term.
- Users involved in special research projects will have access to any related special-purpose research laboratories; the access will expire shortly after the project or the user's affiliation with the Division comes to an end.
- Anyone who does not fall into any of these categories will be granted access on a case-by-case basis.
- **Door Access**
The CSG works with third-party vendors and the Key Shop to install and maintain security hardware and software for doors in laboratories that the CSG manages and other restricted use rooms. The CSG controls user access to certain doors via this security system.
- **Network Connectivity**
The CSG works with [ITS](#) to ensure that every piece of networked equipment in the Division has an active, working network connection. The CSG also manages network name and address assignment and various network services (for example, directory, mail, Web, file and printer services) within the Division.
- **Facilities Issues**
For managed laboratories only, the CSG works with the [Facilities Services Group](#) on such issues as air-conditioning and electrical power.

Facilities Support Restrictions

- **User-Installed Network Equipment**
Users must not install their own network equipment (such as hubs/switches, WAP's and bridges) on any network maintained by the [CSG](#). Improperly installed or configured network equipment can render a network unusable by anyone.
- **Food and Beverages**
No food or beverages are allowed in the general undergraduate laboratories. Any food or drink found in these laboratories may be confiscated, and the user may be locked out of the laboratories for a period of time.

Although the CSG discourages the practice, users of other laboratories or offices may have food and beverages. Any accidents with food or drink that spill onto laboratory or office equipment must be reported immediately to the CSG. The maintenance contract may or may not replace damaged equipment. CSG keeps some older keyboards, mice and monitors that may be used in these situations on a case by case basis.

Network Services

The [CSG](#) provides the following support for facilities in the [Division](#):

File Services

The CSG will provide file services to the networked equipment in the Division, as follows:

Student Disk quota: 250 megabytes

Grad Student's: 850 megabytes

Faculty and Staff Disk quota: 15000 megabytes

- Faculty can purchase additional quota for \$1/month/Gig. So, to receive 16G of quota (your 15000 meg + 1024 meg more), it will cost \$12/year. This quota is total file space quota including group or project quota not in your home account.
- Shared space or projects are setup on a by request basis.
- Self managed equipment access to departmental Email, Web, ssh, and printing is the responsibility of the user. Some limited file service may be possible, depending on the type of unmanaged equipment. Samba access available for all shared mount points and NFS access is available for your home account on a request basis. See the [self managed machine checklist](#) for additional details.
- Managed equipment: services for unmanaged equipment, plus file services and remote management all provide by the CSG group.

Accounts

Faculty and staff in the [Division](#) will have accounts that are created based upon the University wide HawkID that expire sometime after the owner ends his or her employment with the [University](#). The password is separate from you HawkID password.

All graduate and undergraduate majors in [Computer Science](#), [Mathematics](#), or [Statistics and Actuarial Science](#) are entitled to an account usable in any applicable departmental educational and/or research laboratories. The [CSG](#) will create such accounts by request. A student account will expire shortly after the student graduates.

If the instructor of a course within the Division requests course accounts, the CSG will create temporary accounts for those students. These accounts will expire one term after they are created.

Anyone else who would like an account in the Division must apply for an account. The application must be signed by a faculty member in Computer Science, Mathematics or Statistics and Actuarial Science. Such accounts will be limited to a period of time to be determined as circumstances dictate.

All accounts and the rights associated with them are the sole property of the **single** individual on record as the owner of the account. Rights and ownership are not transferable. Individuals are not to give access to an account to anyone else.

The use of an account is limited by departmental affiliation and status of the account owner. Having an account within the Division does not entitle the owner to access to every workstation within the Division.

Remote Access

In situations where a user is trying to connect to equipment with the [Division of Mathematics](#) from off-site, the [CSG](#) has no control over the user's remote equipment or the connection from that equipment into the Division. Therefore, the CSG can provide only very limited help for remote access from locations outside of the Division.

- **Dial-in Access**
Dial-in access from off-campus locations will receive absolutely no support. The large number of combinations of different types of remote hardware, software, and phone access makes the task of supporting remote dial-in impossible for a small support group.
- **Remote Network Access from Campus Sites**
The CSG cannot support access from networked off-campus locations. The CSG will cooperate with other on-campus support organizations to help troubleshoot problems connecting from on-campus sites. However, the CSG does not control the network equipment even within MacLean and Schaeffer Halls. There is no guarantee that the CSG can resolve any connectivity problem from locations outside of the Division of Mathematical Sciences. For technical details see the [remote access help pages](#).
- **Remote Network Access from Off-Campus Sites**
The CSG can provide no support for network connections from outside the [University](#).
- **Wireless access**
Wireless service is provided by central IT (ITS) and is partially available in most of MacLean Hall and Schaeffer Hall. For help or details on the ITS wireless service please reference the [Wireless Support](#) pages from ITS.

Anonymous FTP

Anonymous FTP will only be set up by request, and only for faculty and staff. The service is too large a security risk to grant to all users.

Both read and write anonymous FTP access is available by request (<ftp.divms.uiowa.edu>)

Passwords

The [CSG](#) continually is subject to attacks in which potential intruders attempt to guess passwords. If anyone does not have a good password that is changed regularly, then that person's account is vulnerable to such attacks. One bad password puts not only that user's files at risk, but also increases the odds that everyone else's data might be compromised.

On a regular basis, the CSG will attempt to crack passwords on all managed platforms. Due to the importance of having good passwords, the following policies have been put in place:

- If we are able to crack a password, the user will be notified. The user will then have three days to change the password. If the password is not changed in this time frame, it will be changed by the CSG.
- If a user's password is cracked in three consecutive attempts, the CSG will disable the user's account for a period of 15 days or assign a secure password for the account. This will ensure that enough time has passed that any intruder that may have been able to crack the password has become tired of trying to log in.

Web

Each user has a web page available at [http://www.\[cs, math, stat\].uiowa.edu/~username](http://www.[cs, math, stat].uiowa.edu/~username). Please see the [DIVMS Web help](#) pages for details.

Mail

The CSG provides mail services for its faculty, staff and grad students. For detailed mail instructions please consult the [mail help pages](#).

CSG support the major mail clients and has the most experience supporting Thunderbird. Other supported mail clients are Pine, Webmail (<http://webmail.divms.uiowa.edu>) Eudora, Outlook Express. Outlook is known to be flakey with the mail server CSG is using.

Shared folder support is available by request.

CSG provides virus and SPAM tagging.

Vacation, mail forwarding and quota checking can be accessed via the web page at <http://mail.divms.uiowa.edu>

Quota for mail is defined as follows:

Faculty and staff 1000 meg hard, 800 meg soft

Grad students 500 meg hard, 400 meg soft

See <http://www.divms.uiowa.edu/csg/> for more information on the services CSG provides and additional documentation.