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Purchases

UT has special purchasing in place with Dell. This makes it very easy for departments to order Dell computer hardware with their Premier site which integrate with the UT purchasing system. If you are making a purchase for a computer which will be owned by UT, please use the Premier site to make the purchase. Do not use their ordinary Business to Business site. By using the Premier site you will have access to much better hardware, and support options. For more information, please see the ITS page for Dell purchases. Special pricing on Dell hardware is also extended to student, staff, and faculty personal purchases. The ITS run computer store in Flawn Academic Center can also help with computer purchases including Apple hardware.

Things to consider when making a purchase:

1. support contract
2. long term management
3. backing data up

We have a list of common Mac parts.

Repairs

In limited instances we can help with PC repairs, and emergency disk repairs. We do not work on Apple laptops, though. Sorry, but they are just too painful to take apart, and require too many special tools. People that have bought computers with Dell support, or with Apple Care can work with Dell and Apple for support. If you do not know whether your computer is covered by a support contract, please let us know, and we can help you find that information. University owned equipment can be be repaired by the University Data Center. The Help Desk in Flawn may also be able to help with personal computers.

Clusters

Notes About the New Cluster

CCBB maintains 3 clusters:

- phylocluster (phylocluster.ccb.utexas.edu) is a general purpose cluster; for access permissions please contact David Hillis.
- chencluster (chencluster.biosci.utexas.edu) is for use by the members of the Chen Lab; if you do not have account please have Jeff Chen confirm you are a member of his lab.
- ceres (ceres.ccb.utexas.edu) is primarily for use by the Wilke Lab members; if you do not have an account, please have Claus Wilke confirm you are a member of his lab, or otherwise have his permission to have an account.

All 3 clusters share home directory space on our fileserver. Selected labs may also have access to bulk storage hosted on the fileserver.

phylocluster

Our general purpose cluster, phylocluster, is a 15 node cluster running ROCKS v.5.2. The head node, phylocluster, has 2 Intel Xeon 2.80 Ghz CPUs with 2 GB of RAM.
The 15 nodes in phylocluster are Dell PowerEdge SC1425 1U units. Each system has 2 Xeon 3.20 Ghz dual-core CPUs, and 2 GB RAM. Each node also has a 36 GB Seagate ST336754LW SCSI disk attached to the system via an Adaptec AIC7902 Ultra320 SCSI adapter. The bulk of this disk - 27 GB - is used for /state/partition1 which is available for temporary storage of files.

chencluster

The Chen Lab cluster, chencluster, is a 47 node cluster run ROCKS v 5.2. The head node, chencluster, is Dell 2850 with two dual core 3.20 GHz processors. Internally it has 200 GB of storage, and internally it has 1.5 TB storage on an external S2A 3000 fibre channel disk array.

The 47 nodes in chencluster are Dell 1850's with two dual core 3.20 Ghz CPUs with a Maxtor Atlas 36 GB 15K RPM, leaving 27 GB for local storage.

ceres

The Wilke Lab cluster, ceres, is a 32 node cluster running ROCKS v 5.3. The head node, a Dell PowerEdge 2950 2U system, has two Intel Xeon X5355 2.66 quad-core CPUs, and 8 GB of RAM. The system has 6 500 GB uSATA drives attached to a PERC 5/i RAID card. The drives are arranged in a RAID 5 configuration with 1 hotspare adding up to 2.0 TB of storage.

17 nodes in ceres cluster are each Dell PowerEdge 1950 1U systems have 2 Intel Xeon X5355 2.66 Ghz quad-core CPUs with 8.0 GB of RAM. The nodes each have individual 73 GB 15K RPM SAS drives. This provides 55G of temporary storage space on /state/partition1. 15 nodes are Dell R410's with 2 Intel E5520 2.27 Ghz 8-core processors each. 10 of the nodes have 8 GB RAM, and 5 have 32 GB RAM. All have 160 GB SATA drives.

Other Systems

We also maintain the following systems

- Kremlin/dacha (kremlin.ccbb.utexas.edu/dacha.ccbb.utexas.edu) on behalf of the Matz Lab.
- Genomes (genomes.biosci.utexas.edu) on behalf of the Jansen Lab.

If you need access to one of these systems, please contact the appropriate lab head. Note that currently none of these systems use our fileserver, but we do ensure that they are backed up.

Data Storage

The Center provides centralized data storage on a Sun X4275 server (files.ccbb.utexas.edu). This server provides the home directories for accounts on all of the clusters. It also provides bulk storage for the Bull, Cannatella, Chen, Hillis, and Hofmann Labs. More information about using the file server can be found on here. All data on the file server is backed up according to schedule mentioned in the next section.

NOTE: Due to the security requirements of such systems, NO CCBB systems are qualified to store Category I data. At most research data, or other personal files should be stored on CCBB systems. If you need to store sensitive, private data you need to do so securely. The easiest way to do this is to use an ITS data storage solution such as Austin Disk Services, or Webspace.

Backups

All CCBB maintained systems are backed up to LTO3 tape. We take a full snapshot of all of the systems right around the first Friday of the month. Then we back each system up daily to back up any new or changed files on that day. We try to keep about 3 months worth of tapes. 1 month is stored off site, 1 is stored locally, and 1 is the set we are currently writing. This should give us plenty of copies of files so if you find that you have accidentally deleted a file, or wish to restore an earlier version of a file, please let us know.

Note: Backups are best effort. Because of hardware, software, or other issues we may have to defer or skip a given day's backup. Also, the intent is to provide disaster recovery. You should never remove files assuming that we will permanently have a backup. Instead you should make any archival copies that you want, or you should contact us and we can tell you how to purchase tapes that we can use to make a copy of your data.

NCBI Databases

Currently we are working on providing a local repository of commonly used NCBI databases.

SQL Servers
Currently we provide none. We do have an internal MySQL server, but have no dedicated storage space for it. Also, we are currently evaluating proper backup software, so that we can ensure your databases are safe. If you still wish to have us host your database under the conditions that backups are your responsibility, then please let us know.

**Web Servers**

We can provide hosting for small web servers with moderate data storage needs, and moderate software demands (eg, PHP, MySQL). More elaborate sites should be hosted elsewhere, either with ITS or another hosting company.

**Windows Servers**

Currently we provide none. Possibly we might provide one in the future though. Until then you should investigate the [server](http://ssc.utexas.edu/software/stat-apps-server) provided by the Division of Statistics, and Scientific Computing.

**Networking**

**Wired**

CCBB has a number of wired connections which should already be connected to the network. However, some jacks may be connected to one of our private networks. If you cannot get access to the network, please let us know what jack number you used. All jacks provide 10/100 MB ethernet.

**Wireless**

The wireless networking is provided by an antenna in PAT 141. All wireless access points at UT MUST be provided and maintained by ITS T&N. No other wireless access point is authorized. Please do not violate this rule; doing so is an extreme security risk. Two networks are provided. Unless otherwise exempted all wireless clients are expected to use the Restricted network which requires a WPA2 login using your UTEID. If a client cannot be configured to work on the Restricted, an exemption can be granted allowing it to use the older Guest network. See a member of the computing staff for help doing this. This requires a browser session to be started, and an attempt made to access a non-UT URL, at which point the user will be required to log in. Guest is a misnomer; not-UT visitors who really are guests will need to have temporary accounts created for them. If you are hosting a visitors, and they will need wireless access, please have them fill out a request for guest access (sorry this is the information we must provide when we create accounts, so it's better for your guest to come prepared). The Restricted/Guest network restriction is typically lifted at the start of the Fall semester, so that new students, and faculty will not be cut off from the network. This typically ends on the 12th class day.

ITS Telecommunications and Networking is currently working to select a vendor to provide pay for use wireless similar to that in coffee shops, bookstores, and restaurants. The intent is this would be used by visitors who are here only for a short time, but who are used to having wireless access where ever they go. For UT related people, use of that network is optional, but it might be an easier way for guests in a hurry to get access to the network. A pilot program will be run starting in mid-June during which our two vendors will be given networks at UT. Therefore, do not be alarmed when you see extra networks called AT&T and Boingo come and go over the summer. With these networks, nothing changes. Wired access to the network will still be allowed. Students, faculty, staff, and official visitors should continue to use the Restricted network. Non-official visitors who are here for a short time can be brought to PAT 141SC for accounts on the guest network, so long as someone is willing to sponsor their activities. However, if it's more convenient, or if you are unwilling to sponsor your guest(s), they are free to use the paid service.

**VPN**

UT provides a virtual private network, or VPN, used to connect to secure services on campus. Depending on which lab you work in, certain systems may not be accessible unless you use the VPN. Certain other secure UT provided services may also be inaccessible. The VPN is simple to use; clients for both Mac, and PC can be downloaded from [http://www.utexas.edu/its/bevoware](http://www.utexas.edu/its/bevoware) Bevoware. Use of the VPN is restricted to faculty, staff, students, and official visitors. More information about the VPN can be viewed at the [http://www.utexas.edu/its/vpn/index.php](http://www.utexas.edu/its/vpn/index.php) ITS VPN page.