INSTRUCTOR’S GUIDE

to EECS Instructional Computing - Fall Semester, 2002

This document describes our student accounts, application software and instructional support. For many courses, the EECS Instructional computers and student accounts are already set up. Instructors are encouraged to contact us to insure that any special needs are met.

EECS Instructional & Electronics Support
377 & 386 Cory Hall, 333 Soda Hall
510/643-6141
inst@eecs.berkeley.edu (Soda labs; UNIX)
labfix@eecs.berkeley.edu (Cory electronics labs)

INFORMATION and HELP:
EECS Instruction provides on-line documentation about all aspects of the computer facilities. These methods access the same data files:

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<thead>
<tr>
<th>where you are logged in</th>
<th>sample command</th>
<th>what it accesses</th>
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<tr>
<td>Instructional UNIX computer</td>
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<td>any internet computer</td>
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<td></td>
<td>ftp cory.eecs.berkeley.edu</td>
<td>Instructional ftp server</td>
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ACCOUNTS FOR EECS STUDENTS:
EECS and CS majors are provided with permanent UNIX "named" accounts on the EECS Instructional computers in Cory and Soda Hall. Students can use these accounts for much of their coursework. Qualified students who do not have an Instructional UNIX account can obtain one automatically - they should read the green bulletin boards by 199 Cory Hall, 271 Soda or 333 Soda Hall to find out how.

For some classes, additional NT or UNIX computer accounts are issued that are set for specific software and labs, and expire at the end of the semester. Instructors should arrange for class accounts with the support staff (email to "inst@eecs").

Instructors can have superuser access privileges over class accounts on the UNIX systems, using the command 'tasu'. Instructors can have only limited access to files in a UNIX named account, using the 'tahandin' command. For that reason, class accounts are still preferable for many entry-level classes on the UNIX systems.

There is more detailed information about the student accounts later in this document.

Many of the Instructional labs are open for "drop-in" 24 hours, 7 days a week. A cardkey is often required for access. Some labs are restricted for specific classes. Instructors may request access to specific types of computers, such as Windows NT, UNIX or Macintoshes.

For information about what's in our labs, please see http://inst.eecs.berkeley.edu/clients.
For information about what labs are assigned to your class, please see http://inst.eecs.berkeley.edu/for-instructors.html.

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CLASS ROSTERS ON-LINE:
The most accurate list of students who are registered for a class and their email addresses is available from the Registrar’s WEB site:
http://bearfacts.berkeley.edu
Faculty can access that data using their CalNet ID.
EECS Instruction maintains additional data about the local email addresses and cardkey access at
http://inst.eecs.berkeley.edu/roster
This site asks for the login and password that you would use to login to an EECS Instructional UNIX system such as cory.eecs. All Instructional UNIX "class master" accounts are authorized by default; these are accounts with login names such as "cs61a", "eecs20n", "cs150" etc. Other teaching staff can be authorized to read this data; please ask inst@eecs.berkeley.edu or Kevin Mullally (643-6141).
At your request, we can put the class enrollment list in a file in your instructor account or email it to you.

DETECTING PLAGIARISM:
We have copies of histok (by Paul Heckbert) and moss (by Alex Aiken), programs for comparing C source files, to detect the degree of similarities. From the output, the user can decide on the likelihood of plagiarism. These are installed in /share/b/histok and /share/b/moss on the EECS Instructional systems. Access is enabled for instructor ("class master") accounts. There is a basic help file that you can read using the commands:
  more /share/b/histok/README
  more /share/b/moss/README
At your request, we can run these programs for you on specific students’ files.

CARD KEY ACCESS:
Cory and Soda Hall Instructional labs (and the buildings themselves) require access by cardkey on evenings and weekends. The labs are open weekdays. Students need to obtain cardkeys and to renew their cardkeys for access to our labs each semester.
Cardkeys services are available in 391 Cory and 387 Soda (8:30am-noon, 1pm-4:30pm). New cardkeys cost $25 ($10 non-refundable fee + $15 refundable deposit). There is no charge for updating the authorization on an existing cardkey. Due to the volume of requests early in the semester, there is often a 2-4 day delay in activation.
Students who are enrolled via TeleBears will not need faculty approval for cardkey access. Others (Concurrent Enrollment, UC Extension, etc) will need approval from the instructor. Instructors can send email to inst@eecs to notify us of additional students in the class. Students may also use our "EECS Instructional Account Request" form (from 386 Cory) to submit an instructor’s signature for approval.
CS Lower Division courses are given cardkey access to the labs in the second floor of Soda Hall. CS61A also gets access to 310 Davis. CS and EE Upper Division classes typically get access to the drop-in labs in the second floor of Soda Hall as well as 111, 117, 119 and 199 Cory. The drop-in labs are not locked during weekday hours. 349 Soda and electronics labs in Cory are generally restricted to specific classes and require a cardkey 24 hours/day.

SCHEDULING INSTRUCTIONAL LABS:
Instructors who wish to reserve a lab room should contact the Instructional staff ahead of time. We may have to negotiate the time with other instructors who are using the room. We encourage instructors to post information about lab schedules on the bulletin board in the lab room.
CLASS NEWS GROUPS:

The news system can be used to send messages to your students. Each class is allocated one news group, named **ucb.class.your-class**, for example, ucb.class.cs162. Please use this alternative to email when sending messages to all students at once. Netscape Messenger is very convenient for reading and posting news, and it is available on all of our computers. Students should read [http://inst.eecs.berkeley.edu/connecting.html](http://inst.eecs.berkeley.edu/connecting.html) for additional information, including how to read UCB newsgroups from off campus.

Digests of previous articles for class newsgroups are available via anonymous ftp to news.berkeley.edu, within the directory /pub/ucb.class.

See `/usr/pub/news.help` for more information.

INSTRUCTIONAL LABS:

The computing and electronics labs for CS and EE classes are located in

<table>
<thead>
<tr>
<th>rooms</th>
<th>equipment</th>
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<tr>
<td>EECS computer &amp; electronics labs:</td>
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<tr>
<td>271, 273, 275, 277 Soda:</td>
<td>UNIX workstations</td>
<td>inst@eecs</td>
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<tr>
<td>349, 330 Soda; 119 Cory</td>
<td>NT workstations</td>
<td>inst@eecs</td>
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<tr>
<td>310, 349 Davis; 199 Cory:</td>
<td>UNIX workstations</td>
<td>inst@eecs</td>
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<tr>
<td>111, 117, 119 Cory:</td>
<td>PowerMacs &amp; NT workstations</td>
<td>inst@eecs</td>
</tr>
<tr>
<td>105, 125, 204b, 208, 264A, 264B, 353 Cory:</td>
<td>NT workstations &amp; instrumentation</td>
<td>labfix@eecs</td>
</tr>
<tr>
<td>345 Davis</td>
<td>Macs &amp; UNIX (Selfpaced)</td>
<td>labfix@eecs &amp; inst@eecs</td>
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</tbody>
</table>

| cory.eecs, star.cs, nova.cs, pulsar.cs, quasar.cs, dv310.cs rhombus.cs, pentagon.cs, po.eecs, torus.cs mingus.eecs oldcory.eecs | Solaris SPARC login servers | inst@eecs |
|                                                                                                  | Solaris X86 login servers | inst@eecs |
|                                                                                                  | HP 9000 login server      | inst@eecs |
|                                                                                                  | DEC Alpha login server    | inst@eecs |

| IS&T labs:                                                                                      | Macs, PSIIIs               | reserve@socrates |
|                                                                                                  |                               |                 |

For information about what’s in our labs, please see [http://inst.eecs.berkeley.edu/clients](http://inst.eecs.berkeley.edu/clients).

All users have access to monochrome laser printers.

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MODEM and HOME-IP ACCESS:

To register for the campus modems, a student should login to the campus registry system from a networked computer account using the command `telnet home-ip.berkeley.edu` and enter "home-ip" as the login (no password is required). The user enters the SID number and is issued a login name and password. Further directions are on the screen. The modem login and password allows one to use campus modems and, optionally, home IP as well.

This will become the user’s permanent login to access all UCB modems. The modem login name and password are not related to any other computer login and password on campus, and temporary class account logins (such as "cs61a-zz") should not be used as modem logins.

EECS Instruction currently provides additional modems just for our students. These modems will be discontinued on Dec 31, 1999.

Students who are not enrolled via UC Berkeley cannot get UCB SID numbers and cannot use the HomeIP service or other UCB services that require an SID or CalNet ID. This includes UC Extension (and Concurrent Enrollment) and NTU students.

These are phone numbers that EECS students can use:

- 643-9600 - IS&T modems; free to all UCB users
- 848-1107 - IS&T SHIPS ($10/month)(http://www.net.berkeley.edu/dcns/modems)

Please see [http://inst.eecs.berkeley.edu/connecting.html](http://inst.eecs.berkeley.edu/connecting.html) for more information about remote access.

APPLICATIONS SOFTWARE:

We now maintain a list of current application software on our systems under the command `/share/b/bin/software`. It also describes UNIX commands such as "swwlocate" and "which", for locating specific programs.

Typical directory locations for applications software are:

```
/usr/local/bin
/usr/sww/bin
/usr/eesww/bin
```

Programs that require more complex setup procedures are generally described in text files within the `/usr/pub` directory. In some cases, that text file is displayed by default for users who try to execute the application before setting up their environments properly.

Here are some of our applications:

- **SPICE:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **OCTOOLS, CADTOOLS:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **MAGIC:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **SUPREM:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **MATLAB, SIMULINK:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **MAPLE:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **POWERVIEW:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **XILINX:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **GL:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **LISP:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)
- **SYBASE:** See [http://inst.eecs.berkeley.edu/software](http://inst.eecs.berkeley.edu/software)

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NAMED ACCOUNTS:

Undergraduates who are declared as EECS or L&S CS majors and EE and CS graduate students will now be given long-term named accounts on the EECS Instructional systems. The account will remain active as long as the student is in the department. It will not expire or be turned off at the end of each semester. For many courses, no other accounts will be issued - rhombus.cs, pentagon.cs, # # po.eecs, torus.cs # Solaris X86 login servers # inst@eecs students will use their named accounts for all coursework.

For undeclared and non-EECS majors, a single named account may be issued or, for certain classes, only a generic class account will be provided. This account will expire at the end of the semester. Undeclared students in CS Lower Division courses may be eligible for permanent named accounts, with the approval of the CS Advising office (Barbara Hightower, 339 Soda).

To obtain one of these accounts, users should refer to instructions that are posted on large green bulletin boards near 199 Cory and 271 Soda. For a named account, a user should login as the user newacct (password: 'newacct') at any Instructional workstation or use ssh cory.eecs -l newacct from any another networked computer. The student should go to 391 Cory the following afternoon to claim the account form. For a class account, the student should obtain the account form from the instructor.

INSTRUCTOR ACCESS to FILES in a NAMED ACCOUNT:

Generally, if an instructor needs access to the students’ files, then the students should be given class accounts for that coursework.

There is a utility that can be used for handing in student assignments on-line:

/share/b/bin/tahandin is executed by teaching staff to gain access to specific files within a "named" account. For example, if the user "professor" runs the command:

    tahandin cs260 pat

"tahandin" changes the UNIX ownership and permissions on the subdirectory "pat/cs260" so that "professor" has access to all files in that subdirectory. The user "pat" must have previously created the "pat/cs260" subdirectory. The user "professor" must have been entered in the "tahandin" config file and be in the same UNIX group as "pat". Because of file access restrictions, the utility does not work in all cases.

Instructors should request such access from the sys admins. There is more information in a manual page: type man tahandin.

'Informed Consent' REQUIRED FOR DISPLAYING STUDENT IDENTITIES:

Information that you display publically via University computers may not include the name of a student without an "informed consent" from the student. Restricting access to WEB pages, say to the EECS or BERKELEY.EDU domains, is not sufficient: informed consent is still required. This is a requirement by federal law. An example of "informed consent" is:

    "I, (student name), consent to have my name posted on (webpage title & url), a paper copy template of which is attached to this consent form. My name may be posted on this webpage from (date) to (date). I understand that my consent to have my name posted on this webpage is not a condition of my participation in (name of the class), nor will it be used as a basis for grading my performance therein."

Please refer to the Policy Analysts at the Office of the Registrar, 127 Sproul Hall, for further clarification about the requirement for "informed consent".

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'GRADE' DATABASE:

Class accounts on the Instructional UNIX systems can be set up to have a simple database of students’ grades. Using the ‘grading’ program, students can read their own data; authorized TAs and readers can enter and modify the data. Please see the help file in /usr/pub/grading.help for current information. The help file can also be accessed via "Grading" under http://inst.eecs.berkeley.edu/software.

DISTRIBUTION OF CLASS ACCOUNT FORMS:

We give the account forms for these accounts to an instructor in a sorted pile. Instructors are expected to supervise the distribution of the class account forms, insuring that only enrolled students acquire accounts and that each student is given just one. The accounts for the class master, TAs, and readers should be issued to no one else.

Students no longer have to sign and return a portion of the account forms. Instead, they will be asked for their name and student ID number the first time they login to the new account. This information is logged into the ~/records/grades subdirectory of the instructor account. This information initializes the "grades" database that can be used later to record and view users’ grades.

No special system privileges are available to TA and reader accounts. However, the owner of such an account is regarded implicitly as a trusted representative of the instructor.

INSTRUCTOR ACCESS to FILES in a CLASS ACCOUNT:

The class master may access the files of the students with the command /share/b/bin/tasu -{login} Please exercise this access with care. Here is an example of UNIX commands to run a command as if you were the owner of each class account (while logged into an Instructional UNIX computer):

```
 cd csi62/class
 foreach acct (*) # includes all accounts in the .class directory
tasu - $acct -c 'ls' # run "ls" on user’s dir; could run a script or program instead
end
```

Please note that there is no longer a ‘tapasswd’ command, which was previously used to allow instructors to run ‘passwd’, ‘chfn’ and ‘chsh’ on a student account. We implemented the NIS+ password service in July 1998, which provides increased security and convenience for users but makes the old if they have forgotten their passwords.

All class accounts are set up to source the files adm/class.cshrc, adm/class.login, and adm/class.logout under the class master directory. This can be very useful if you would like to print a message or perform some class set-up whenever students log on/off. Please ask us for help if you are uncertain about the use of these special utilities.

FURTHER INFORMATION:

This document is stored in the file Instructors.Guide in each instructor home directory.

General EECS Instructional announcements will appear in certain USENET newsgroups (ucb.ee.grads, ucb.cs.grads, ucb.ee.undergrads, ucb.cs.undergrads), and on bulletin boards in the Instructional labs. General information is available on-line using WWW browsers (URL = http://inst.eecs.berkeley.edu).

Instructors and TAs are asked to email Kevin Mullally (kevinm@eecs) and Cc: "inst@eecs". Students are expected to sent email directly to "inst@eecs".

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