### New Flat Screen Displays

Perhaps the most visible change made in the Design Center this summer is the 50 new 20" HP TFT Flat Panel displays in 608A and 605. With a native resolution of 1600x1200, these screens allow users to work more efficiently by providing a generous increase in desktop size over the 17" LCDs used previously. Next summer, we plan to continue this project by replacing the displays in the Solaris labs (608B&C) with comparable 20" displays from Sun. And remember, to keep the new screens looking nice, **do not touch them with your fingers.**

### Full-time Windows Administrator

This summer, the Design Center added a third full-time position. After much resume reading, interviewing, discussing, meeting, and late night pizza consumption, we feel we've found a great fit for the job in Aaron Spielman. Aaron comes to us with a very strong background in Windows Server and Desktop administration. He is already hard at work evaluating the current state of the Design Center's Windows environment in an effort to squash some of the more intractable issues we face on that platform. His knowledge and expertise will be pivotal in the upgrade to Windows 2003 server, to be done for the Winter quarter. In addition, he will oversee the replacement of our three Windows servers, which will carry the improved Design Center Windows environment. But most importantly, he will oversee the day to day operation of all things Windows in the School of Engineering. For now, his office is in the back of lab 605, Room 605A. His extension is **4390** and his e-mail address is: **spielman@engr.scu.edu** Please join us in welcoming him.

### Printing Upgrades

This summer the printing capabilities of the Design Center were greatly enhanced. First, we replaced our aging laser printers with top of the line models from HP. Second, we've gone from two laser printers to four. This has allowed us to put the printers physically closer to the labs that print to them by default. Room 605 has a dedicated printer; the Solaris labs (608B&C) share a printer, while the Windows labs (618 and 608A) share two printers. This arrangement should reduce printer bottlenecks and will reduce the distance you have to walk to get your printouts.

### Double-sided Printing

As mentioned below, we have upgraded our printer capabilities significantly. One of the new features is double-sided printing. As each of our four laser printers is equipped with a duplexing unit, you can automatically print on both sides of the page, reducing the total number of pages you print. As a result, using duplex printing extends your print quota, since you are only charged for the total number of pages that come out of the printer. Instructions for duplexed printing vary by operating system and application. Please see a lab monitor for details on how to make use of it.

### Workstation Upgrades

This summer we officially dropped HP-UX as a Design Center lab platform. As a result, we replaced the HP systems in 608B with Sun Blade 150s running Solaris. This change also allowed us to retire server1 and server8, our HP-UX servers. In 618, the aging HP Vectras were replaced with 3.06GHz P4 workstations from HP identical to those recently added to 608A and 605.

### Engineering Network Upgrade

If you were on-campus at all this summer, you probably know all too well that the entire physical infrastructure of the School of Engineering network was upgraded. From switches to cables to jacks, it's all brand new. While the upgrade wasn't exactly problem free, things have stabilized now thanks to the efforts of the contractors, the IT department, and the staff of the Design Center. As always, if you feel you are experiencing a network related issue, please contact the Design Center via:

phone: **408-554-4909**
e-mail: **support@engr.scu.edu**
web: **http://helpdesk.engr.scu.edu/**

and we will be happy to help you.

For the technically curious, all network wiring in the school was upgraded to category 6 UTP, a big step up from what was mostly category 3. This means that our wiring infrastructure can now support 100Mbit to each jack, where we were previously limited to 10Mbit in most cases. Additionally, each standard jack now has a coax connector on which is carried SCU's cable TV service. At layer 2, we've migrated from 3Com to Extreme Networks switches. These new switches provide more stability, throughput, and ease of maintenance.

**Santa Clara University**

### Server Room Upgrade

Many large projects were undertaken this summer, but none larger for the Design Center than the complete upgrade of our server room. You probably know it as the strange, seldom-opened room in the back of 618 and 608A. If you've ever seen the inside, you know that while it could be described as many things, "well designed and laid out" was not one of them. Indeed the server room had acquired its old state mainly through being added to over time, rather than through any real design. As engineers know, this is a recipe for trouble. But countless hours of planning; talking with vendors; waiting for delivery; finding new vendors; hefting heavy, oddly shaped boxes up to the second floor; and finally installing it all, have paid off in what we believe to be quite the model of a good server room. Gone are the two post racks, complete with worse than useless cable management. Gone is the horrible rat's nest of patch cables, some over 50' long, used to connect the patch panel jacks to the switches located not more than 7' away. In their place stand three brand new HP 10000-Series Racks. These racks make use of the existing floor space so well that we can (and eventually plan to) add four more without any physical expansion of the server room. Additionally added were an IP based KVM switch and three remotely controllable power strips. These will allow us to perform even more operations remotely, diminishing the time necessary to fix the problems which invariably strike when no one is physically on-site.



**Out with the old...**



**...and in with the new.**

### The DC Logo Contest Continues

We're still looking for a logo. Sleek and sci-fi is the theme. Anyone at SCU may enter. Submissions must be made in a vector format and should scale well from poster sized down to letterhead. Your submissions must be your own, and by entering you grant SCU a royalty free license in perpetuity to your entry.

**$**  1st place - **$250**  **$**
2nd place - **$150**
3rd place - **$50**

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$ fortune
There are two major products that come out of
Berkeley: LSD and UNIX.

We don't believe this to be a coincidence.
                        -- Jeremy S. Anderson
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