



**Santa Clara  
University**

# Engineering Design Center Fall/Winter 2005 Newsletter

<http://www.dc.engr.scu.edu>

November 21, 2005

## Full-Time Windows Administrator

After a false start and an extra year of resume reviews and interviews, we found the perfect fit for our Windows System Administrator. Jason Chong comes to us with a strong background in Windows server and desktop support. He is already well into the planning stages of our migration to Windows 2003 Server, which will provide increased stability and ease the administrative burden. His office is right outside the Design Center main entrance, Room 606. He can be reached by phone at 408-551-1893 or via e-mail: [jchong@engr.scu.edu](mailto:jchong@engr.scu.edu). Please join us in welcoming Jason.



## Expanded Disk Capacity

During the spring of 2003, the Design Center consolidated all its network accessible disk space onto a 2TB NAS. This fall, we will be adding a second, 6TB NAS from Dynamic Network Factory to the network. This additional capacity will allow us to meet the storage needs of the School of Engineering for the next several years. Additionally, once in production, it will allow us to increase default student disk quotas from 100MB to 500MB.



## Expanded Backup Capability

Hand in hand with the addition of the new NAS, we are upgrading our backup capability. Currently we run our backups on a Sun L8 Tape Library, which has a total capacity of 1TB. We will be supplementing this with the addition of a Sun L25 Tape Library. The L25 provides two important improvements over the L8. First, it can backup a total of 10TB. Just as important however, it comes with two LTO3 tape drives, providing significantly decreased backup times thanks to much higher throughput. Furthermore, this will allow us to expand the backup service we offer to faculty and staff, a development currently in the planning stages.



## New Color Printer

We have upgraded Design Center color printer to a much faster HP Color LaserJet 3700ps. Color print quotas are still fixed at 100 pages per quarter. If you need more, please contact a system administrator.



## Winter Upgrades

Winter break will be a busy time in the Design Center. We will be migrating much of our data to the new NAS while also upgrading the OS on our current NAS. **This process will begin at 8am on December 12th and continue till 8am on December 15th. During this time, all DC resources will be unavailable for both local and remote access.** We will also be replacing the CRTs in 618 with LCDs and all remaining 19" LCDs with 20" LCDs with a native resolution of 1600x1200, giving all DC workstations equal display capabilities. **The CRTs (21" HP P1110s) will be available on a first-come, first-served basis starting the first week of December.** Furthermore, we will be moving the desks currently in 605 into 608C, allowing us to move the workstations in 608C off the tops of the desks. 605 will then receive new desks similar to those in 618 that allow us to put the LCDs in the desk itself to better facilitate the use of 605's projector.

## New Sun Workstations

As the speed of our HP PC workstations had outstripped that of our Sun Blade 100/150s, we took a long look at the Sun presence in the Design Center. After some intense negotiations with Sun, we upgraded both Sun labs (608B/C) with top-of-the-line Sun Blade 2500 workstations. These systems are the fastest commercially available workstations Sun makes, and are configured to the limit. Each has two 1.6GHz UltraSPARC IIIi processors and 2GB of RAM, as well as a complete PC on a card that allows them to run Windows inside Solaris, in much the same way we currently run Windows on Linux through VMware. Thanks to Sun's generosity, we were able to secure these systems at a 65% discount. We currently hold the distinction of being the only university in California that has these systems available for student use. We are still tweaking their configuration, so if you notice any slowness or unexpected behavior, please let us know.



## Cameras

To improve security and safety the Design Center is now equipped with CCTV cameras. It is our belief that the cameras will provide greater accountability for the various pieces of expensive equipment in our labs as well as heighten awareness of lab policy and personal conduct.



### Sun Day

Early in winter quarter, Sun Microsystems will be holding a "Sun Day" in the Design Center. Topics covered will include:

#### Academic Computing

- HPTC Grid
- Workstations
- Thin Clients
- Sun developer connection
- Sun STAR initiative overview

#### System Administration

- Sun Solaris 10 update
- Sun Server update
- Sun Management Services
- Sun Storage update

Further information will be provided as the schedule is finalized. We hope to see you there.



### New Servers

#### Unix

We've added two new Solaris servers. Each is a Sun V240 with dual UltraSPARC III 1.5GHz processors and 2GB of RAM. One will be used to support core networking functionality (DNS, mail, etc) while the other will serve as the Solaris student webserver. We also added four new V20z linux servers. Two have dual AMD Opteron 250 (2.4GHz) processors and 4GB of RAM while the other two have dual Opteron 252(2.6GHz) processors and 4GB of RAM. Of the first two, one will support core networking functionality while the other will be the Linux student webserver. Of the second two, the first is now functioning as the network probe, used to troubleshoot network issues internal to the School of Engineering. The second has become the new Engineering firewall, replacing the original firewall built and installed in the fall of 2000.



#### Windows

We are currently installing and testing what will become our new Windows 2003 Active Directory on three new HP Proliant DL380s, each with dual Pentium 4 Xeon 3.4GHz processors and 2GB of RAM. Once testing is complete, two will function as AD servers while the third will handle application serving. We are also awaiting delivery of a Sun X4100 which will function as a core server for Windows-based infrastructure services such as SMS, Windows Update Services, and Ghost. It is powered by two Opteron 254 (2.8GHz) processors and 2GB of RAM.



DL380s, each with dual Pentium 4 Xeon 3.4GHz processors and 2GB of RAM. Once testing is



### New Plotter

This summer we replaced the aging Design Center plotter with a top of the line HP DesignJet 4000ps. It can print sheets up to 42 inches wide and 265 feet long at a rate of 1000 square feet per hour. Due to the high cost of media and ink, only class and project related plots will be allowed.



### \$ fortune

Walt: Dad, what's gradual school?  
 Garp: Gradual school?  
 Walt: Yeah. Mom says her work's more fun now that she's teaching gradual school.  
 Garp: Oh. Well, gradual school is someplace you go and gradually find out that you don't want to go to school anymore.

-- The World According To Garp