

Customer Profile:



The Bren School of Information and Computer Sciences at the University of California Irvine (ICS) focuses solely on the computer and information sciences. With a strong foundation in computer science fundamentals, the school conducts cutting-edge research in strategic areas ideal for collaborative work. Their goal is to produce a diverse, educated workforce for advancing technology, stimulating the economy and transferring new technology into the public realm to greatly advance quality of life. The school enrolls more than 1200 undergraduate and graduate students, and it is ranked as one of the TOP 15 public Computer Science graduate programs by the U.S. News & World Report.

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- William (Bill) Cohen
Director of ICS Computing Support

UC Irvine – Bren Information and Computer Sciences

UC Irvine Computer Sciences Chooses D-Link Switches to Ensure Reliable, High-Performance Data Processing for Genome and Bioinformatics Applications

The Challenge

A group associated with UCI’s Bren School of Information and Computer Sciences (ICS), the UCI Institute for Genomics and Bioinformatics (IGB), needed switches for managing large data file transfers and data set crunching. The IGB group is involved in Genome projects which require intensive computing to map genes and perform “blast” procedures for examining DNA strands.

IGB is ICS’s largest customer for computing support. They have clustered servers (more than 300) and the largest pool of disk space that ICS manages. In order to provide increased bandwidth to desktops in a wing of an ICS building, ICS needed to replace legacy switching equipment. As a public institution with tight budgetary concerns, they wanted top-of-

the-line equipment at a fair price. Availability was also a priority. The school has had trouble procuring switches from a D-Link competitor in a timely manner. As a side note, they also needed IP cameras for an ongoing foot traffic and emergency response research project in their building.

The Solution

UCI ICS installed four DGS-3324SR 24-Port switches and three DXS-3350SR switches which handle the very large data sets the genome and biometric department was running, and to meet their own internal needs. “The new equipment is definitely helping IGB to move their data around and connect their clusters,” said Bill Cohen, Director of Computing Support at UC Irvine Bren Information and Computer



The UCI Institute for Genomics and Bioinformatics (IGB), located in Computer Science 2, replaced their legacy switching equipment with D-Link xStack switches for better throughput.

Business Class Switching



DGS-3324SR - 24-Port 10/100/1000 Switch + 4 combo SFP, 10Gig Stacking

- Integrated Dual 10Gig Stacking Ports
- Recoverable Ring or Star Stacking Architecture
- Advanced Standards-Based Enterprise Features



DXS-3350SR - Managed 24-Port 10/100 Stackable L3 Switch, 4 Gigabit Copper Ports, 2 Combo SFP

- 176Gbps Switching Capacity
- Recoverable Ring or Star Stacking Architecture
- Dual 10-Gig Stacking Ports and Optional 10-Gig Uplinks

Sciences. “They also run some servers locally in that area, so anything within that building travels much faster than it does to the outside world. The stuff they run locally and the models they do locally, it’s definitely much better for them.”

With D-Link, the school got the equipment they needed at a very attractive price point. “When I recommend a D-Link switch versus [a competitor’s switch], there is a huge difference in price, also availability,” said Cohen. “[With the competitor] we have had to wait a long time, a minimum of a month for some of our switches, sometimes two. It’s very difficult to tell people, ‘Yeah, go buy that and wait.’” In fact, one of the IT staff at the Institute for Genomics and Bioinformatics (IGB) has held up the deployment of a 10 system cluster because he is waiting for one of those competitive switches. Cohen recommends D-Link because he knows he can get delivery quickly and avoid stalling projects.

As their equipment needs grow, ICS will continue to add D-Link switches. “When grants for equipment come up and departments are adding machines to run as a cluster, I will be suggesting D-Link as a solution,” said Cohen.

IP Cameras Help with Research and Surveillance

In addition to the switches, UCI ICS installed 62 D-Link PoE 6620 cameras as part of a building traffic research project. “The project uses cameras to study how people move about a building,” said Cohen. “One of the groups that helped get this going looks at helping early responders to fires and catastrophic damage. They want to be able to use those cameras to determine how many people might still be in the building.”

“Every time somebody walks by, the software counts one,” continued Cohen. “Then if they walk by the other way, it subtracts one. It can recognize which way the person is going and keep track of the number of people on a particular floor.”

When that project is not using the cameras, they act as regular security cameras. There are approximately 11 cameras per floor of the 6-story building.

D-Link helps UCI stay on the leading edge of computer science research with state-of-the-art networking gear.