



## The ATON Project

Center for Research in Electronic Art Technology  
University of California, Santa Barbara  
Computer Vision and Robotics Research Laboratory  
University of California, San Diego  
CalTrans Test-Bed Center For Interoperability



# ATON Report 2000.5: The ATON Hardware/Software/Network Infrastructure at UCSB

## Introduction

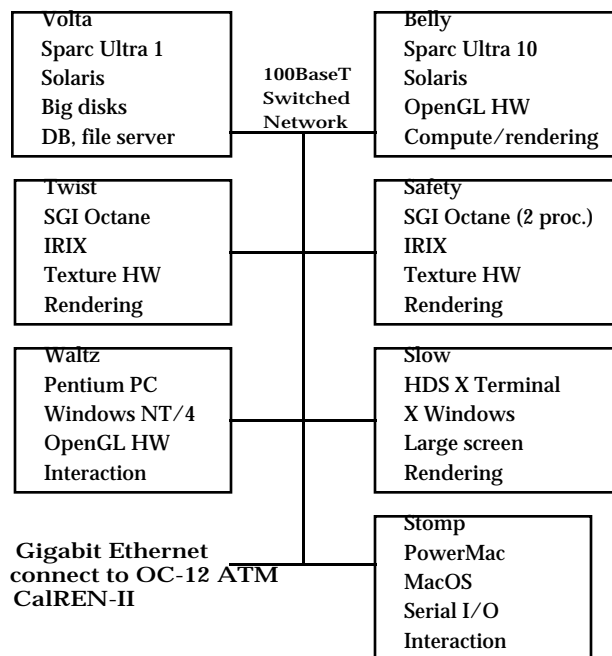
This document presents the computing and network infrastructure being set up at UCSB as part of the DiMI ATON Project.

## CREATE ATON Infrastructure

There is a special ATON laboratory has been set up at UCSB, and the local ATON researchers also use the facilities of the CREATE center for several parts of their work. We describe each of these facilities below.

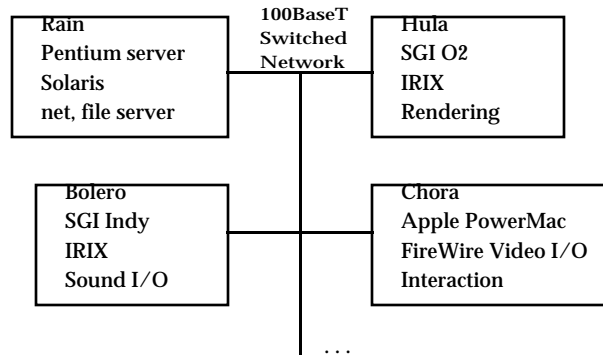
### ATON Lab in South Hall

The primary site for ATON activities at UCSB is the facility in South Hall rooms 1401 and 1409, soon to be moved to a larger space on the third floor of South Hall. This encompasses the main DRIVE server network of 4 powerful UNIX servers (2 Sun and 2 SGI), which have specialized storage, processing, and I/O configurations. These are complemented by a WindowsNT PC, an X terminal, and an Apple Macintosh.



### CREATE Base Network

The CREATE server network also includes both Sun/Solaris and SGI/IRIX servers with mainly Macintosh end-user machines.



### Special Facilities

CREATE provides us with several special-purpose multimedia facilities, including their recording studios (4- and 8-channel sound), their video editing lab, and other test sites.

The research suites in room 2203a-c provide UNIX and Macintosh access, with stereo hi-fi sound or 4-channels in the video suite. The “sound booth” in Lotte Lehmann Concert Hall contains both OpenGL-accelerated Sun rendering servers and a Macintosh machine for remote I/O. The down-stairs CREATE studio complex includes several 4- and 8-speaker sound studios and a variety of client machines.

### Remote Sites

Several of the senior ATON researchers have home-office systems with server-class computers and medium-speed DSL or cable modems, giving us a usable Metropolitan-area network (MAN).

### Wide-Area Connections

CREATE and the ATON Lab are components of the CalREN-II infrastructure, and connect via Gigabit Ethernet links to the campus backbone and ATM OC-12 connection to the outside. We intend to carry out significant performance testing of the local-medium- and wide-area networks in the second year of ATON.

