

# SAN DIEGO SUPERCOMPUTER CENTER

## DATA CENTER

**DATAMINING FACILITY**

**SUN HPC 6000**  
20 processors  
4 GB memory

**SUN FIRE 15K**  
72 processors, 288 GB memory  
132 GFLOPS peak speed

**TERAGRID SAN**  
Storage Area Network  
250 TB disk storage  
when completed

**SUN STORAGE T3 ARRAY**  
40 TB disk storage  
**3 BROCADE SILKWORM**  
12000s gigabit switches

**HPSS**  
High Performance Storage System  
400 TB stored, 5 TB disk cache, 6 PB capacity

**IBM SP**  
64 Power3 processors

**5 STORAGE TEK 9310 TAPE SILOS**  
twenty 3590 Magstar drives, eight STK 9840 drives, twenty-four STK 9940B drives

## COMPUTATIONAL RESOURCES

**BLUE HORIZON**  
**IBM SP**  
1,152 Power3-II processors, 576 GB memory  
1.7 TFLOPS peak speed  
5 TB Global Parallel File System

**WEB FARM CLUSTER**  
**13 SUN ULTRASPARC SERVERS**  
10 GB memory  
850 GB disk storage  
7-8 million bits/month

**SUN HPC 10000**  
64 processors  
64 GB memory  
51 GFLOPS peak speed  
1 TB disk storage

**17-NODE ITANIUM CLUSTER**  
34 processors  
1 GB memory  
13.6 GFLOPS peak speed  
306 GB Parallel Virtual File System

**ECCO**  
Estimating the Circulation & Climate of the Ocean

**SUN HPC 10000**  
28 processors  
14 GB memory  
19 GFLOPS peak speed  
600 GB disk storage

**NPACI/UCSD SUPERCOMPUTER RESOURCE**

**DIGITAL LIBRARIES & DATA MANAGEMENT**

**NATIONAL BIOMEDICAL COMPUTATION RESOURCE**

**6 SUN E420s**  
each with 4 processors  
4 GB memory

**2 COMPUEN BIOXL/P**

**2 SUN HPC 4000s**  
8 processors  
4 GB memory  
120 GB disk storage

**PROTEIN DATA BANK**

**2 SUN ENTERPRISE 450s**  
total 8 processors, 8 GB memory  
508 GB disk storage

**TRAINING ROOM**

## VISUALIZATION

**Z-CORP Z402**  
Rapid Prototyping System

**HELISYS LOM-1015**  
Rapid Prototyping System

**SGI ORIGIN 2000**  
8 processors  
InfiniteReality2

**HIGH-DENSITY DISPLAY**  
Single light source uniform tiled display  
3 x 3 array of video projectors  
3480 x 3072 (12 million) pixels

**GRAPHICS COMMODITY CLUSTER**  
10 dual IA32 nodes, 2 TB RAID disk  
100 million polygons/second

**VIDEO AND AUDIO EDITING SUITES**

**BIOLOGY WORKBENCH**

**3 SUN E420s**  
12 processors  
4 GB memory

**CALNGI**  
Southern California  
Next Generation Internet  
Application Center

**NETWORK PERFORMANCE REFERENCE LABORATORY**

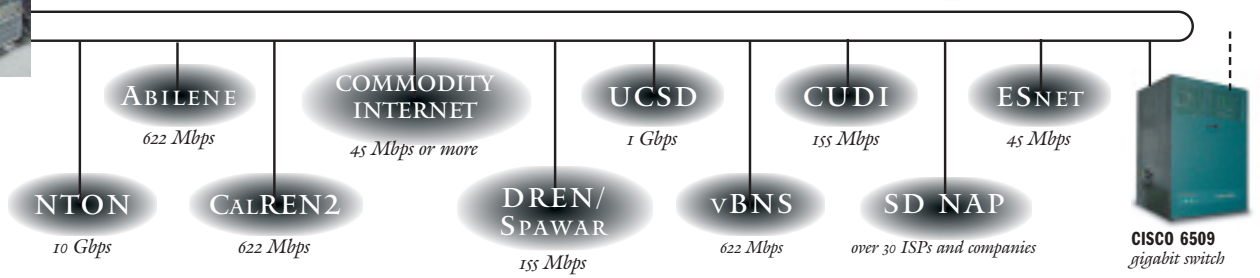
**JUNIPER M40**  
gigabit router

**HPWREN**  
High-Performance Wireless  
Research & Education Network  
NETWORKING EQUIPMENT

**NLANR**  
National Laboratory for Applied  
Network Research  
NETWORK ANALYSIS  
EQUIPMENT

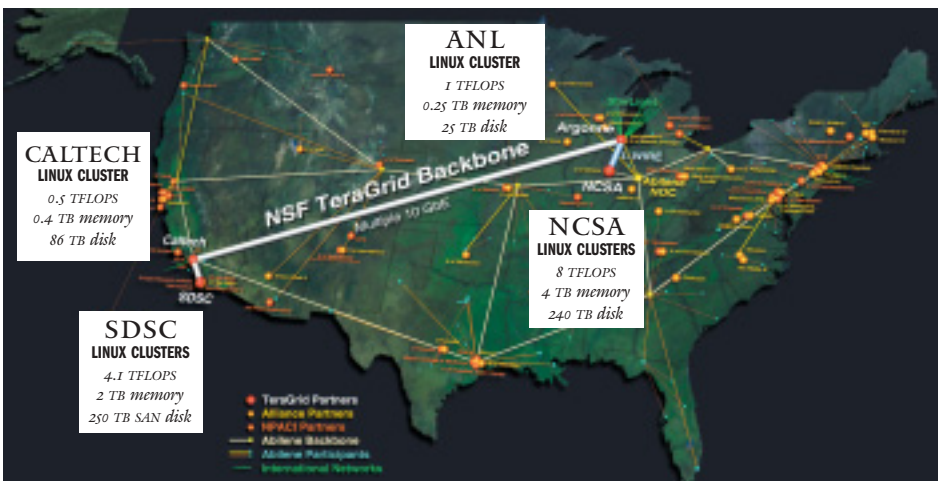
**CAIDA**  
Cooperative Association for  
Internet Data Analysis  
NETWORKING EQUIPMENT

## WIDE AREA NETWORKS



## TERAGRID

Distributed Terascale Facility



## NPACI RESOURCE PARTNERS

National Partnership for Advanced Computational Infrastructure

**PRODUCTION SYSTEMS**

**IBM SP (P25C)**  
176 processors, 96 GB memory  
113 GFLOPS peak speed  
University of Michigan

**CRAY SV1**  
16 processors, 16 GB memory  
19 GFLOPS peak speed  
University of Texas

**CRAY T3E**  
272 processors, 37 GB memory  
163 GFLOPS peak speed  
University of Texas

**RESEARCH CLUSTERS**

**BEOWULF**  
106 processors  
15 GB memory  
23 GFLOPS peak speed  
Caltech

**MILLENNIUM**  
512 processors, 118 GB memory  
237 GFLOPS peak speed  
UC Berkeley

**SANTARITA (IA-64)**  
40 processors, 80 GB memory  
128 GFLOPS peak speed

**TEJAS (IA-32)**  
64 processors, 32 GB memory  
64 GFLOPS peak speed  
University of Texas

**ATHLON**  
128 processors  
64 GB memory  
100 GFLOPS peak speed  
University of Michigan

**IBM REGATTA**  
64 processors  
128 GB memory  
333 GFLOPS peak speed  
University of Texas

## MASS STORAGE SYSTEMS

### Abbreviations

GB: gigabytes  
Gbps: gigabits (billions of bits) per second  
GFLOPS: billions of floating-point operations per second  
Mbps: megabits (millions of bits) per second  
PB: petabytes (1,000 terabytes)  
SAN: storage area network  
TB: terabytes (1,000 gigabytes)  
TFLOPS: thousands of billions of floating point operations per second



**HPSS**  
323 TB capacity, 70 TB stored  
300 GB disk cache  
Caltech

**DMF**  
260 TB capacity, 35 TB stored  
800 GB disk cache  
University of Texas

**ADSM**  
42 TB capacity, 8 TB stored  
2 TB disk cache  
University of Michigan



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