

capacity of the exabyte drive is about 2 gigabytes.

Future Plans

Future plans include configuring the development system as a server and allowing it to serve one other machine. This will provide more extensive testing of software on the development system and pull off another machine from the main server. The major project for second semester 1989 is testing all software user Sun OS4.0 in order to upgrade all machines on the network to Sun OS4.0

R. Link

Updated Network News

The CFHT network has remained relatively static over the past 6 months. Rather than expanding we have been concentrating on making use of this valuable resource. Some of our uses are detailed below.

Status

Our network is currently comprised of an ethernet backbone in Waimea connected to the summit ethernet via a T1 link provided by Hawaiian Telephone. The summit network is connected via a leased line to the University of Hawaii at Manoa where we enter the three major networks.

There are currently 13 Suns, 9 HP9000's, a MicroVax, and a personal computer resident on this network. In addition, we are beginning to have 'visitor' computers show up. One of our visiting astronomers, C. Pritchett, brought his own Sun workstation with him, and we have had visiting instruments attach to the network during their observing run. We will be adding 2 HP9000's and 3 personal computers to our network in the near future.

Electronic Mail

We are currently members of the three major networks; Internet, Bitnet, and SPAN. Our addresses on these networks are:

Internet: user@cfht.hawaii.edu
Bitnet: user@UHCFT
SPAN: UHCFT::user

Our standard for CFHT personnel is to use their last name for their mailing address. If you are unsure of which address to use send the mail to 'postmaster' and we will forward it.

Network Time Protocol

All the Unix computers at CFHT use the network time protocol to synchronize their times to National Standards. Currently two of our hosts track the time at the San Diego Supercomputer Center and the remainder use these two as internal standards. The protocol is accurate enough that there is typically less than a 10 millisecond difference between our local standards and the mainland clocks.

Rick McGonegal

FTS Data Reduction on the CFHT Network

Background

The computer environment for FTS data reduction has progressed from the HP1000 to the Vax750 to the MicroVax. Since CFHT has recently embraced the Unix operating system via a network of Sun and HP Unix workstations, the FTS data reduction program has once again been ported to another computer system. This move is not only necessary, but should prove advantageous to users. For example, the FTS program is usually run under the SunWindows environment, providing the user with a sophisticated, yet easy to use, set of tools. The June 1989 FTS run will be the first use of the Sun3 version of the FTS program.

Implementation

While there have been many internal changes to the FTS program to accommodate Unix, the basic logic and user interface have been preserved. Thus, the program will 'look and feel' the same as the previous versions. The FTS program is written in the FORTRAN and C languages. The plotting routines are from the Supermongo package provided by R. Lupton and P. Mongo. Currently, the FTS package can only be run on a Sun3 or terminal.

Data Conversion

Coincident with releasing the Unix port of the FTS reduction package is the switch of the FTS data acquisition software to the HP9000 computers. One result of this switch is that all summit FTS data tapes will be in FITS format. Previously, these tapes were in native HP1000 FTS format. The FTS package now accommodates the FITS format.

As well, output of the FTS data reduction package is now in FITS format. In the past, users of the package had been taking data off-site in VMS backup format (files being in the native FTS data format). While FITS output poses no problem for CFHT, there are a number of sites using the VMS FTS package with no FITS input capability. To aid these users, CFHT has created a VMS conversion tool for transforming FITS format into the old FTS format. This conversion program is available upon request.

Future Plans

Future versions may include:

- using the IRAF image format internally instead of the native FTS format
- porting the FTS program to the Sun4 platform; it currently runs only on Sun3's
- improving the speed of hard copy plots, for example, plots of 75,000 points take up to 20 minutes for completion; the speed of hard copy plotting is currently limited by the serial link to the plotter

R. Link