

From: Tony Denault
To: IRTF Techgroup
Subject: Recommended Upgrades for the IRTF Computers
Date: Jan 2010

This document outlines recommend upgrade to the IRTF network and observing computing environment. Some item provide option rather than a single recommendation due to cost/manpower issues. These items should be discussed.

1. Replace 7 computer used by the Telescope Operation and Observers, \$14K total.:

- Upgrade 2 Telescope Operator Computers, \$4K.
- Updated HP and Manoa/Hilo remote room computers used by observers. 5 computer * \$2K = \$10K.

Total = \$14K.

2. Replace IRTF Disk Server, \$20K.

The IRTF uses 2 Network disk units to store all its network data: user data, observing data, application, user account, mail, web site, etc. These units were purchase in 2004 and provide 1 TB of usable disk space. We are unable to upgrade is storage capacity due to its obsolete OS and disk interfaces. Our space usage has been over 90% at times. Replacement units would provide larger raw storage capacity (4 TB of usable storage).

We with 2 purchase 3 units:

1. IRTF summit disk server
2. IRTF summit disk server, hot spare..
3. Hilo unit for offset site backup.

Each unit would be a rack mount computer with a RAID peripheral and 8 disk. Cost is approximately \$6.6K each * 3 units = \$20K.

3. New Tape backup system, \$13K.

The current tape drives were purchased in 2004 and have a 300MB capacity per tape. Our current storage unit is 1TB. Item #2 will increase the storage to about 3TB. A higher capacity tape drive and tape are needed to handle the increase volume of data. Two Tape unit (\$4K each) and 60 tapes (1 year supply, \$70each) is requested. Total \$13K

4. Replace Building-wide Keyboard, Mouse, Monitor Switch, \$25K.

The IRTF Cybex is a building wide Keyboard, Mouse, Video (KVM) switch allowing the TO and Observed access to over 12 computers through out the building. This KVM support 2 local consoles (TO and Observers), allowing ether station access to any connect computers (including Instrument computers)... The Cybex has been end of life for a number of years, and does not support network access, a feature necessary for remote trouble shooting and

support. Many newer system are not attached to the Cybex as it is out of ports. A replacement KVM system is needed.

A new KVM would provide a local operator station, and access for other over the network. A system providing 16 computer ports at 3 locations (Telescope Cass, TCS Room, Server rack) would be \$25K.