Instrument Committee: Nov 14, 2017   *Equipment Needs for Isolated Network*

Shimadzu requires a separate network card from that used for instruments. Most of the Shimadzu instruments interface via USB, so it appears that only a limited set of computers will require new cards.

Partha Datta sent me a list of 21 instruments that we should put behind the firewall. In addition, we should consider adding other instruments, computers and servers to the list.

Network Access Storage (NAS) device.   Devices can be configured as single drives, separated into multiple systems, RAID, or combinations.   Device with built-in server and OS, but no disk drives.

Four-bay device, max 32T:
QNAP TS-453A Four-Bay NAS Enclosure **$589.00**

Eight-bay device, max 64T:
QNAP TS-831XU 8-Bay NAS Enclosure **$1,139.00**

Drives for NAS device. Minimum two drives, maximum eight:
8TB Red 5400 rpm SATA III 3.5" Internal NAS HDD **$274.99**

Network Cards:

Partha listed 21 machines, plus one or two servers, so maybe 25 x $25=$625 for network cards. We'll also need network cables.
Intel Gigabit CT PCI-E Network Adapter EXPI9301CTBLK

 Price: $24.79 *Free Shipping for Prime Members*

Firewall Device:
Cisco ASA 5506-X with FirePOWER Services - security appliance $676.99

Cisco ASA 5505 Software License $179.99
50 to unlimited users

Cisco L-ASA5506-SEC-PL (Security Plus Lic. with High Availability, Sec. Cntxt)
$249.00 L-ASA5506-SEC-P

Annual Subscription License ~ $300

Misc:
Patch Cords: < $10 each, quantity 50
External Backup Drives: 6Tbyte, $170, Quantity 4

Optional: Server System with 64G RAM: $3,000

Estimated Totals (minus server):
$1140 + $275 x 4 + 25 x 25 + $677 + $250 + $300 + 50 x $10 +4 x $170 ~ $5300

Hi Tim,

We gathered all the instrument's computer model numbers here for you:

Teknor Apex Lab:

1. 400 MHz NMR - HP Z440
2. 300 MHz NMR - HP Z440
3. GC-BID - DELL T1700
4. LC-MS - DELL T5810
5. GC-MS - DELL T1700
6. DSC + TGA - DELL 3620
7. UV-VIS - DELL T3620
8. Fluorimeter - DELL T1700

Advanced Teaching Lab:

1. GC-FID - DELL T3620
2. IR - DELL T3620
3. UV-VIS - DELL T3620
4. LC-MS - DELL T1700
5. AA - DELL T3620

Other Teaching Labs:

1. Room-220: GC - DELL T3620
2. Room-235: IR - DELL T3620
3. Room-235: GC - DELL T1700
4. Room-240: GC - DELL T3620
5. Room-245: IR - DELL T3620
6. Room-245: GC - DELL T1700
7. Room-260: IR - DELL T3620
8. Room-260: GC - DELL T1700

Regards

Partha Datta