new backup server

Source: http://unix.derkeiler.com/Mailing−Lists/SunManagers/2006−12/msg00138.html

- *From*: Chris Hoogendyk <hoogendyk@xxxxxxxxxxxxx>
- *Date*: Fri, 15 Dec 2006 09:53:14 −0500

After a long time, I've finally gotten approval to proceed with building a centralized backup server. I've had the configuration and pricing set for a while, but need to check and confirm everything before proceeding.

I'm interested in whether anyone on the list has any experience or comments on my choice of tape changer, or comments on issues related to how it is configured, potential modes of upgrading (adding another tape drive, adding another changer, etc.), getting drivers for it, etc.

I have a number of hand−me−down Sun Enterprise 250 servers. So, that is my base. Dual 400MHz UltraSPARC II processors, 2G memory. I'm going to add a dual channel Ultra−SCSI PCI card, and configure the system with two 73G internal drives for system and mirror/live upgrade and two 300G internal drives for Amanda to use for scratch/disk backup space (all Seagate Cheetah). The installation is Solaris 9. I'm already playing with it on a single "old" 36G drive.

The tape changer I'm looking at is the Sony StorStation AIT Library LIB−162/A4 (AIT5 *just* came out, should I risk a 162/A5?) It is a carousel rather than a robot. It holds 16 tapes (3.2TB native with AIT4, anybody's guess compressed) and can have a second tape drive added. It is significantly less expensive than the expandable robot systems I was looking at (Qualstar, Overland, etc). Also, in the "expandable" systems, adding the expansions was very expensive. So, I'm not sure what advantage I would have been buying in the original box. With the Sony system, I would just buy another and stack them (even stick it on a separate SCSI bus). Amanda seems to be flexible enough that I can just configure it to work with both. Seems to me like a no−brainer, as though it's really the marketing folks who are pushing the more expensive robotic systems. Price has been a significant issue in moving this project forward.

I will get an APC Smart UPS 1500 to connect the whole setup.

I have several other E250 servers that will be backed up by this system over a 100MB network. We will initially not build any sort of backside network for backing up. If it is important, we may later. The servers have been added to over the years by various research labs in the department and have external disk cabinets with various disks from 18G,

73G, 146G to 300G. I may end up with a basic Amanda configuration and some additional archival configurations for different labs. The total disk space actually used appears to be in the range of a few hundred gigabytes at present, although it fluctuates a lot and is constantly growing, usually gradually but with periodic surges.

At present we have DAT3 drives on almost all our servers and run tapes almost every night using a tapewriter script that I wrote to handle snapshots, tunnel through ssh across the network if necessary, and use a configuration file. We'll phase that out when the amanda system gets running. I've been looking at all (not expensive) options for backup software, including bacula and amanda. At the moment, I just feel more comfortable with amanda for a variety of reasons.

I would appreciate any feedback and comments on my configuration and choice of tape changer. I have to submit orders before the 21st.

TIA

−−−−−−−−−−−−−−−

Chris Hoogendyk

_
O__ −−−− Systems Administrator
c/ /'_ −−− Biology & Geology Departments
(*) \(*) −− 140 Morrill Science Center
~~~~~~~~~~ − University of Massachusetts, Amherst

<hoogendyk@xxxxxxxxxxxxx>

−−−−−−−−−−−−−−−

Erdvs 4
~~~~~~~~~~