Lane County Technology Advisory Committee
MINUTES

Present: Christina Okesson (LESD), Arne Berglund (LESD), Daniele
McCallum (LESD), Jason Dodge (LESD), Fred Spencer (97J),
Richard Reaksecker (66), Jerry Pergamit (1), Nathan Martin (52),
Nathan Bowers (71), Ben Gernhart (40),

Added:

- Jerry is leaving Pleasant Hill effective July 1. District will be posting the
position, changing the length from a 10-mo position to 11 or 12 months.
Also hiring an instructional tech coach and 5th-grade facilitator. Junction
City is also posting a position to add a staff person to Bob.

- Nathan Martin asked about using DFS for files services. Is anyone using?
Arne mentioned that years ago LESD looked at it, and tested, back with
Windows 2003. Fully matured in 2008. Richard doesn't currently use it, but
he has at other places. Pretty solid in the 2008 environment. What about
Access Based Integration? Arne has played with that. Default setting on
2008 file server. Daniele has had discussions with staff at LESD, and they
all think that it would be great to only see folders they have access to.
LESD is currently going through a restructure for file services. A few users
(i.e., asst supt) should have access to all. Richard organizes by department
with shared folders nested deeper.

- Daniele: what do folks do for maintenance contracts? Does anyone make it
a practice to have specific maintenance contracts? Example of HP switch
with included 24-hr replacement, and the vendor wanting to sell us 4-hr
replacement, when the switch is located here in the main building. LESD
buys spares of some equipment and cables, if it is less than $500 (i.e., APs,
district routers). Crow doesn't purchase maintenance contracts. When
Richard was in Cottage Grove they kept a limited number of support
contracts and kept spares. Support contracts get more expensive as the
equipment ages; you get to a point where it is less expensive to just replace
the hardware. Pleasant Hill always tries to replace hardware before it
breaks; example of phone switches. Is it worth the LCTAC group
standardizing hardware so that we can keep a supply of spares? Bethel
purchases maintenance contracts (next business day) on the core switches,

warranty contracts on servers. Have a spare but not a full production model. LESD has 4-hour contracts at the core, which means HP has a stash of spares locally. Crow had IBM servers with 24-hour support, they often responded in 5 hours. Bethel reported 5-hour support on a Dell hard drive.

- Is there any value to making emergency documentation (contacts, passwords, etc) available to others on your staff? Crow documentation and passwords file is protected and supt has access. LESD is looking at improving our documentation and accessibility methods. Jason keeps local and frequest contacts in a list if anyone ever needs assistance.

Topic of the month: Data-Retention, Disaster Recovery, Archiving, Backups, Security & File Services

- Presentation:
    - Arne presented slideshow. Outline of how LESD cares for district data. Backups to tape and to disk. Most systems use a combination of the two. Backups are worthless unless you can restore data from them. We occasionally do a test restore to ensure it works, last was about 3 weeks ago. Jason also watches the life of the tapes and ensures that they are in working order, along with tape cleaning.
    - Tape backups user for disaster-recovery, medium and long-term recovery options, and rudimentary archival coverage. Tape backups are done nightly and moved off-site daily for storage. We retain snapshot tape backups indefinitely.
    - Backups to disk are used to provide quick restoration of deleted, corrupt, or over-written data or systems.
    - Use tape backup snapshots as archives. Monthly snapshots retained 1 year. Quarterly snapshots retained permanently, never over-written, and stored off-site. Snapshots might contain changeable data or records, primarily webhosts.
    - Network device configs are backed up nightly on weekdays. Email notices every morning with a summary of changes, and network admin (Jason) confirms, provides details to the dept, and logs.
    - Combination of security methods: encryption, user-level authentication, IP space restrictions, firewalls (core and local). Off-site storage is also a secure service.

- Best Practices:
    - LESD: Coverage in absence of Linux admin – awareness of process and schedule. Have considered whether to change our process. Recent incident with a departing staff member who deleted his data. Last backup was from last summer (full backup once a year). What

are districts' policies about individual users' responsibilities for data?

- o Crow full backups nightly to hard drive. 24 hours worth of backup. Beginning of the year snapshot, and at end of the year. Keeps a revision history. Using Symantec System Restore. Takes one full backup and then uses incremental to roll them into one. One shared file for my docs on a weekly snapshot. Keep student data 1 year after graduation. Do a full recovery to a boot-up machine to make sure it works.
- o Bethel had been using backup exec and a tape drive. File server 1.2tb of data, took 32 hours to back up. Moved to Dell Aperture, one server at a school. $6k was the cost. Also backup for workstations. Never do a full backup after it has been done once, incremental snapshots every hour through the day. Can do a full recovery to any point. Thinking of housing it at Fairfield. Using User&DeviceTracker daily to track mac and IP addresses. ConfigManager also.
- o Pleasant Hill hasn't used tapes for a long time. Daily backups of data to a disk, when it runs out of space Jerry starts deleting folders. Has explained to his supt that they are not doing archiving for retention. The response was that employees are responsible for retaining what they need. Jerry warns everyone when they receive a machine that anything on the desktop is not backed up. Encourages users to use flash drives if they work away from the district.
- o Creswell many users using Google drive. Doesn't affect throughput. Have had a few instances where they had to recover items in Google. Deactivate Google accounts when users leave, instead of deleting accounts. Google revision history is very helpful. Ben logs in as the student to do a restore. File server, use "" to backup every night.
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- Challenges:
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- Changes you would like to see:
  - o LESD is working on a secure data-transfer option, that will be discussed with district superintendents and business managers in upcoming months. Discussion of tools that people use: email, fax, phone conversation, password-protected documents, cell phone records and data, etc. Discussion around email discoveries and public records requests. Redaction of non-necessary student info from requested files.

- Favorite tools:
  - Jason Dodge: M Remote NG, remote protocol connections manager. Use it for networking gear, district routers. Can open up 10 switches and tab between them. Super Putty built in to it. Can store credentials in it. What blogs and information resources are out there?
  - Daniele: New PC user from historical mac usage. Print to PDF tool for the PC. PDF creator is the standard at LESD. Latest version has ability to not install all the extra stuff. Allows password-protection with a higher level of encryption.
  - Will have a section in the LCTAC blog for the posting of useful tools, websites, forums, RSS feeds, etc. Feel free to share items like this at the monthly meetings.
  - Jerry likes ACPE mailing list
  - Richard has a bunch of blogs that he finds useful.

Next planned LCTAC meeting, June 18, 2015