

Lane County Technical Advisory Committee
Thursday, Sept 18, 2014 1:00 to 2:30 pm
Room 5, Lane ESD, 1200 Hwy 99N, Eugene

Lane County Technology Advisory Committee
MINUTES

Present: Arne Berglund (LESD), Christina Okesson (LESD), Jerry Pergamit (1), Daniele McCallum (LESD), Jason Dodge (LESD), Joel Higdon (40), Richard Reaksecker (4J), Michael Bateman (28J), Jesse Baber (45J3), Nathan Martin (52), Nathan Bowers (71)

Opening chat:

- Discussion about analog/digital/IP phones and the benefits of each type. Richard mentioned 3CX as a vendor, he is looking at doing some upgrades. Handsets are the largest part of the cost - \$200-\$300 each.
- Jerry asked about options for installing new fiber between buildings. Daniele will email Jerry the contact info from the vendors that provided quotes for the Bethel upgrade.
- LCTAC Blog: Blog was started a couple of years ago but not really used much. We have revamped it, to be a centralized place for information affecting county districts, and to enhance the communication between districts. It is publicly accessible but you have to be a registered user to post. Arne will send out links soon. Arne showed the “categories” selections when creating a blog post, to categorize types of posts. We are hoping this could be a useful tool, instead of just to post agendas/minutes. As we know agenda items are coming up, we can all include items and questions to address during those discussions. Feel free to do the “lost password” if you didn’t already receive a password in your email.

Topic of the Month: Content Filtering

- The goal is to provide CIPA-compliant filtering for everyone except Bethel, Eugene, and Springfield. We also cover one Charter School in Springfield. In the past, all of the 4 filtering systems in the County were M86 (Trustwave). Lane ESD had been on since 2007. Over the years it became apparent that the Trustwave device wasn’t meeting everyone’s needs and wasn’t flexible enough. LESD started looking at different products. In 2012 LESD sat down with Bethel, Eugene, and Springfield, to see if we could all purchase in common. We learned a lot about filtering, and also learned there was no common ground for all 4 agencies. All 4 systems are now completely different: Bethel: lightspeed; Spfd iBoss; 4J Ironport, LESD: Untangle. Don’t know if Springfield and 4J are in production yet. LESD’s evaluation consisted of identifying needs, wants

- (optional), and evaluated a bunch of products. Untangle product was by far the best match for the need/want list that we created. Part of the biggest reason was that this product has more flexibility with offering differences by IP groups. That was a huge plus for us in servicing multiple districts. Other vendors insisted on buying multiple boxes in order to do that. Device went into service over the summer.
- Untangle has multiple devices and product lines. IC Control is the one we purchased (formerly Cymphonix). DX1000 is the model. Dual 3.2 8-core with 96gb RAM and 1TB mirrored installed disk. Installed inline between the core firewall and router. Their price structure is based on number of users and throughput. The LCC traffic passes as throughput, so we needed this level of device. All traffic passes in and out of this box even if we aren't filtering for a district. Traffic flows through even if the power is off (configurable). It is designed to take care of full 1gb throughput. Licensed for 10,000 nodes (a node is an IP that is scanned). 500,000 max concurrent connections. 10,000 concurrent filtered web requests. 200,000 max network nodes (IP hosts). Categories are updated nightly. Filtering options configurable at the IP-group or directory-group level. If it sees an IP address it allocates a license to it. If time goes by and it doesn't see that device, it de-allocates that license and holds it in reserve. Highly recommended in environments with mobile-device access.
 - More flexibility in IP group membership. In the past, Trustwave had limitations in handling IP groups. We now have troubleshooting abilities we didn't have before. ESD engineers can actually "join" your district's filter group to experience issues first-hand. True real time content analysis is possible, in testing we have seen some false-positives. We saw this with some pages that were blocked but then freed up later – this was due to the real time content analysis. We have disabled some of this feature until we have fully tested. Possibility to bind to multiple AD domains. No other vendor could give us this feature. They didn't seem to understand the role of the ESD in servicing school districts. If we and your district decide that you want that capability, there is some configuring at the core, but we can do that. It also supports LDAP as well – and they recommended using the LDAP connection to AD. There is more than one option on SSL filtering – we are still testing this. There is additional cost in maintenance. There is an option to be set to give a block page (a redirect). Michael mentioned the Pinterest issue – the secure version you get a block with "connection reset" and no way to report the block. Then users are all on the phone with tech staff. Have to install the certificate to use this feature, but certificates are unique for each browser. There are other costs as well (Java updates, etc). The goal is going to be to try to come up with a list of things that we can prepare for ahead of time. It might be addressed better by using groups. All filtering options are available on a group basis – nothing is global-only. There are a few ways to do a temporary override in this system also. As we identify and categorize the options, then we will present to districts exactly what they can do.
 - LESD does nightly config backups. We pay for system maintenance and updates. We have an advantage now with system monitoring, over our former product. The management interface comes out of the same dual NIC that is passing traffic. If

the box fails to wire, it no longer answers to pings or to Port 80. If we are monitoring Port 80, we get notified immediately. We create custom groups, rules, and categories as requested. Untangle categories are much broader and fewer. Music streaming issue – if you block music to block streaming music, teachers also can't access educational music sites. Arne immediately put in a feature request for a separate category for music streaming, to separate it out. Don't know how long those requests take to implement. They gave Arne info about how to do that ourselves, created a custom category. Untangle also has a hierarchical structure. The custom category takes priority over the default ones. IP groups are the same way – it looks for the most-restrictive part of the grouping first. The tighter the grouping, the higher the priority is. We also evaluate the system status at a global level, and we have the custom block page.

- Request filtering changes at the link in the system admin page. Encourage staff to send in filtering requests – the information contained in those requests helps us troubleshoot. Arne migrated some of the blocked sites from the old system, but not all of them. Arne made a config change to allow-refer. This solves the Pinterest image issue. Michael mentioned blocked images – no way for the user to report that site. Michael will check when he gets back if there is still an issue with a blocked image/page. Need to look at where we are in the migration process – first step is to try to get to a place where we feel the filter is behaving largely the same that the M86 box was (mostly transparent for users). Then we look into how to enhance and improve the level of filtering without hurting anything. Want the most complete but also least-restrictive results. After we have stabilized this new system, the next phase of the roll-out will be the availability for you to access data and reports for your district. You will hear more about this later. Will be able to look at reports and drill down to get info about web usage in your district. This will be important when reviewing what options to use, and how to use them.
- **Best Practices – Roundtable**
 - Pleasant Hill all requests go to Jerry. He ignores most from students. Teacher requests he reviews and forwards to principals for approval. LinkedIn and Pinterest have been since the change. Social networking is much broader in Untangle. Ning is open, and that is historical because of ODE usage.
 - Creswell is case-by-case. If from students, ignore. If from a teacher Joel responds and approves/denies. Likely it is because they are using the wrong wireless.
 - South Lane, Jesse investigates requests. Kindergarten lesson plans on Pinterest.
 - Fern Ridge, Michael makes the decision case by case. If there are issues to address, he forwards to the principal. Michael also reviews sites and if they are a simple decision, he approves. If it is more complex it goes to a committee.

- Crow, if serious he would take to the supt or principal. Haven't had much come up to address.
- Lowell, not many requests. If easy, Nathan decides. If not, conversation with the supt.
- Bethel, requests go to David and he addresses them.

Email filtering question from Richard about spam in inboxes. Have they signed up for spam filtering? Not turned on by default. Daniele will send Richard the link for folks to sign up.

Jesse asked about email graylisting. SPAM firewall has a rate limit – if the spammer sends 900 messages in a batch, it will kick them out. Not a true graylisting, but other features that help identify messages as spam.

Next planned LCTAC meeting, Oct. 23, 2014