

**Tech Advisory Council
Meeting at Bethlehem
December 9, 2004**

Present: Rawdon Cheng (UHLS), Jonathan Koppel (UHLS, notes), Joe Thornton (UHLS), Marcia Middleton (APL), John Love (BETH), Michael Sweeney (GUIL), Mike Whitney (EGRN), Lorraine Smi (VOOR)

Wireless in Library

BETH, GUIL and APLM are all moving towards public wireless access.

BETH is currently using wireless access (B standard, 11Mbps) for Staff computers. John is securing the network using WEP and MAC address filtering.

His 3COM equipment seems to be working well, but is both environment and model dependant. The nature of the loft at the library, due to the metal shelf supports causes some difficulties.

A LinkSys G-standard access point has been put in place, but is not seen by the "B" router. The "G" technology is supposed to be backwards compatible, but Rawdon raised the concern that a "B" card discovered by the access point will drop the speed for all connections down to that level.

Mike Sweeney recommends anyone who is just starting out to using matching cards and routers/access points when purchasing equipment. He is using B technology in his wireless setup utilizing Netgear equipment. He is also using repeaters to boost his signal.

Mike also explained his use of Power over Ethernet. Two boxes, one on the source side, which has power and data entering, and one on the destination side, which has power and data exiting, are connected by a single Ethernet cable which carries both data and power between the two boxes.

The subject of directional vs. omni directional antennas was raised, but not discussed in detail.

Mike also asked if anyone had used vertical riser ethernet cable, which is a very flat cable used for running up walls. Mike has problems getting a sufficient signal when using it.

Network Security

Marcia M. is going to use her Road Runner connection solely for her public wireless access to keep it physically separate from the library network.

As part of this discussion, it was brought forward that, since the libraries directly connected enter the UHLS system behind the firewall, they are inadvertently exposing UHLS and the other directly connected libraries to potential problems from public wireless users.

To resolve this, at least in part, Rawdon will configure access lists on the Cisco routers.

Support of public laptops

How much support for the public wireless laptops does the individual library and UHLS plan to provide? Will there be any requirements on the part of the laptop owners to be sure they are protected from viruses and spyware? Will they be supporting Internet applications such as email or flash?

Bandwidth to support more public laptops

Rawdon presented materials concerning BlueSocket equipment. Bluesocket provides solutions for libraries which use wireless for the public. It is a firewall and can also be used to throttle bandwidth. Questions

were raised where to deploy this equipment to limit internet bandwidth used by public. How many of this equipment are needed if multiple libraries allow public to access their network.

As the T1 line shared by these libraries outbound from the UHLS building is already maxed out, what will happen when more public laptops come online? Will we need to buy more bandwidth? Who will pay for it? Fee based on usage?

Acceptable behavior of public

Another issue raised was one of confidentiality, and "appropriate behavior". What would users "be allowed" to view, or download. This issue will be discussed later.

It was agreed upon that currently, security is more pressing than bandwidth. Several questions were raised.

- Can Cisco routers throttle/shape bandwidth?
- Is the Horizon client secure? What about the upcoming Horizon Web Client?
- What applications are being used: Anti-virus software, anti-spyware software, Windows authentication and are you saving/storing passwords on the computers, running Windows and Office updates, Fortres, Deep Freeze, MAC address filtering.

Next meeting: Jan 13, 9:30 at UHLS