

University Wireless Committee meeting  
Wednesday, May 30<sup>th</sup>, 2007

Time: 11:50 AM  
Room: ITS Board Room 652, 650 Komas Drive

Attendees: Andrew Goble, Jon Ross, Mindy Tueller, Michael Walker, Hang Wong, Steve Adams, ??, Isaac Jeppson, Michael Place (Xmission), Wes Tolman, Brad, Pieter Bowman, Nelson Beebe, Larry Okun, Curtis Lawson, Tim Urban, Bryan Morris, ?, Mark Beekhuisen

## Minutes

1. uconnect.utah.edu Alternate EAP-types Update – Bryan Morris  
A couple issues right now: Radius server (authentication) is stopping arbitrarily. We wrote a script to restart it, but don't know why it is happening. We're looking at upgrading the server. Also, still having issues with clients. We want everything to work correctly. Quality control issues before it's ready for prime time. Certificates issue – U cert has a problem and is failing. Thought about using a regular 3<sup>rd</sup> party certificate might be easier (cost is around \$300/year for whole campus) . . . ITS experimented with this last year; it works but almost all of major cert issuers do it from an intermediate cert authority (not root). Looked at Thawte and Verisign then. Really hard to find a root cert. Wireless vendors won't support an intermediate cert authority. ITS had infrastructure such that they couldn't move that way. Want one that 's already loaded into the cert caches. Consensus is to look into a 3<sup>rd</sup> party cert that Windows inherently trusts – yes, please. Transport portion is ready but the other underlying issues are delaying implementation of PEAP authentication. Bryan thinks w/in a week or two we can test in pilot locations. Want to do a thorough test with metrics. Steve Adams and Nelson Beebe are interested in doing a test of PEAP.  
Should we restart the Friday Wireless group again? Andrew and Rob have discussed doing a strictly technical group (like 'n').
2. Athletics – charging for wireless access. Hang: groups wanted to charge for events like NCAA but with hotspot that model would go away. Some cost associated with getting a gNID and getting wireless access. This is a policy issue – not for this group.
3. gNID update requested . . . what is the status of generating gNIDs on the fly? A) get a block and dole them out as needed. B) web application with direct access (Hang mentioned they do this). Mindy will send out the link to the OIT Guest Account page and haveDaveHoisveupdate the list on the current status of guest accounts.
4. X-Mission Open Wireless Access Presentation -- Michael Place, X-Mission Director of Systems Administration.  
Xmission embarked on wireless project in Fall 2001. First AP on 4<sup>th</sup> South and State. Expanded in 2003 using that AP out to the City Library and then to other locations. In 2004-2005 worked with city on Main Street project from North Temple to 400 So. Expanded it to 45 separate locations today. Work with businesses – they buy a DSL connection thru Xmission and then Xmission manages the wireless off the DSL. No additional cost to the business for the wireless. Two levels of access: unauthenticated (not an Xmission user) , authenticated (someone with an Xmission account). Authenticated get full bandwidth and no port restrictions. That is the policy but it really isn't being implemented. They were pleasantly surprised when they started the network – there have been no complaints of any kind (including RIAA) in 5 years. Xmission tries to trust users, has paid off. Every now and then they see something that looks like abuse and they block the address and it's gone for good. That is a big incentive for users to behave. This is not published as a policy, but it has happened a few times (several a year, max). Do a lot of education for users. If there is an issue, it's

usually a very positive dialogue with users. People usually don't want to be malicious when they are getting something for free. Are there bandwidth problems on a DSL connection? No. Library gets 40-70 concurrent on average – 1 MB mean, 4-5 MB spikes. Psychology of users on free wireless seems to not use a lot of bandwidth. How restricted is unauthenticated access (or would it be)? Use Open WRT project on linksys Aps; use Chilispot project for authentication and bandwidth policy. What is Xmission's policy on keepign users safe? None – education but not to keep them safe. No actively scanning, etc. Give them privacy, control. Blacklisting of MAC addresses is manual, on a case by case basis (small enough problem). No set policy. Any comparison to other free wireless providers elsewhere? Can't comment. UTA went with a more expensive solution for some reason. They went with Sprint and are testing it now. EVDO boxes. Have you seen any evil twin attacks on SSIDs? None. Users see it as a service they want to use and therefore they behave. Other cities in Utah? Some local providers have been up and down in other cities. Utopia project . . . remember. Nothing significant. Xmission primarily focuses in Utah (connectivity is limited to the state), but host email and other commodity products anywhere. Just got CLEC status. Can act as a telecommunications provider – can put DSL hardware at a Qwest CO and can do a single bill for DSL/IP (soon). Xmission is still small. Virus problems – haven't really seen much. Blacklisting is the way these are handled. Monitoring bandwidth – not port inspection unless a problem is seen. Commercial solutions would allow this but Xmission is all open source or home-grown. Andrew: What will happen when the first abuse complaint happens? Would be great if it could be tracked back to an authenticated user . . . Xmission has explored legal issues (CALEA compliance). Seems like CALEA is focused on 'broadband' providers – Xmission lawyers are trying to figure out if they are one. Bryan: Open source solution for UTA . . . similar project for campus shuttles. Brad at Xmission was the sys admin on that project. Hang: down the road – extra services like SIP on wireless. Any plan? No, a little behind the cure. Want to roll out a VoIP project for customers first.

Thanks to Isaac Jeppsen of the Eccles Health Sciences Library for coordinating the XMission guest presentation.

June meeting – hiatus?? As long as the PEAP information goes out to this list soon and clearly. Has OIT NetOps been buying 802.11n cards? All their resources are on doing installs and PEAP. We need campus help for that kind of testing (maybe the new Friday group . . . .) Reading that Trapeze and Dell have pre-n stuff now. But the working group on n says nothing will be ratified until at least 2008. Want to work with the hardware vendors so they'll cover us when appropriate.