Technology Director
Board Report
October 22, 2013

Looking Back

As you heard at the Community Linkage it is clear that our installed base of hardware is aging significantly. Our current approach to upgrading computer systems has been based on a method that is no longer meeting the needs of our system. What drives this in many ways now is the base operating system (OS) of the computer. The increased use of Internet-based resources has, in many ways, shortened the functional life of many systems. Many web sites require a "compatible browser" to perform acceptably. Downloading and installing a "compatible browser" is not difficult. The issue that comes up is that this new browser must be compatible with the base OS in use by the computer running it. If web sites didn't demand an updated browser, we could use our aging systems with a reasonable amount of facility. From the standpoint of controlling capital expenditures, the requirements made by many of these websites ends up forcing our older systems out of use at a significant rate. Providing such systems has become a significant challenge. It is becoming less and less possible to meet the current demand with older (often times donated or refurbished) equipment as we have been done in the past.

What's Current

Despite what you may be hearing, the wireless connectivity (which is central to our student devices plan) has improved a tremendous amount in the last six months but is not yet where we need to be for regular, reliable, and effective use. The problems we are experiencing are extremely episodic in nature. Most recently, the issue seems to be that we are rolling along just as smoothly and quickly as a salmon through a chute, but then all of a sudden (and not everywhere), the connection either stalls or drops entirely. Interestingly, the wireless controller (the central device which does all the thinking) reports that the connections are fine and that the sailing is smooth. The issue I have had is that the outages are usually brief in nature (5 - 15 minutes) and then the problem resolves without any outside interdiction. By the time I get the support folks on the phone, there is no longer a problem.

Looking Forward

Wireless

To resolve the lingering and unpredictable wireless issues, I have made contact with the regional sales rep for HP and am working with him to find a contractor who has the time, tools and expertise needed to identify the source of our issues and optimize our configuration. The existing support contract we already have is limited to resolving existing problems and the technicians are expressly instructed to NOT make suggestions to their customers; such improvements are the territory of their authorized engineers (private contractors). Given that stipulation, I am working now to find a contractor to help us.

Aging Systems

Replacing computers is an clearly important duty and can be a surprisingly expensive proposition when it comes to enterprise/corporate networks such as ours. Many times I've seen the face of a person who can't believe that our needs are not well met by the weekly special offered at Office Depot or the blow out sale at Target. The need for our systems to be consistent from machine to machine means having very tight specifications. It is also true that the more"selective" we are in what we purchase comes at something of a price. This is something that many find hard to understand because of their personal experience with computers.

Let's consider a person who has a passion for those classic and timelessly stylish older Volvos (especially the 240 model of the early 90s).. They learn how to work on the brakes, how to fix the sunroof, will have spare tires already on

the right sized rims ready to put on when the time comes. Take that same passionate Volvo owner and ask them to also take care of a Buick, Toyota, a Jaguar and a Hummer. Let's also give this lucky guy a moped and a snowmobile just for fun. They now have any number of types of oil, power steering hoses, SAE and metric tools, and so on. This once happy and confident hobbyist has become a frazzled wreck trying to figure out why the Hummer's rear differential is making that whirring sound when coming to a stop.

One of the goals we have set for ourselves in the technology department is to limit the variety of "things" we have in the field to fix. Saving money by buying the best deal each time it comes up works swimmingly when you only have a few of them to manage. But a person who works on and can specialize in Volvos is going to be far less effective when they are asked to work on other rigs as well. In the area of technology, it is worth paying a premium to have systems that are as manageable and consistent from machine to machine as possible. Having this consistency can make the chances of remaining sane much more likely. In a field that is known for changing as quickly and dramatically as technology, such sanity really helps.