

Thoughts on WiFi/laptops replacing wired taps /workstations

Initial statement

On 13 Apr 2010, at 22:41, Cottrell, Les wrote:

The [attached proposal](#) has been forwarded to the ITSC. Not sure if I should comment since I am the secretary of the ITSC and not really a member. Anyhow here are some thoughts in no particular order. I welcome your thoughts, modifications, corrections, additions etc.

If there is a restriction to one computer then it will often be a laptop and for serious work at SLAC will need to be a high end one with plenty of memory and cpu and probably more costly than a run of the mill laptop needed just for meetings, mobile work and at home.

For the same type of configuration, laptops tend to be more costly than desktops and typically have a shorter lifetime.

The network group uses an extra group laptop to support debugging and configuring network equipment on the second floor and elsewhere at SLAC.

If there is only a laptop it will get heavy use being hauled around between home and work whereas a laptop and a desktop computer might result in less wear and tear on the laptop. On the plus side laptops that are plugged daily into the SLAC network are more likely to be patched at the current level compared to a laptop left at home. Also on the plus side we are moving to an increasingly mobile workforce so laptops are becoming more popular and useful than desktops.

Student/interns who are not SLAC employees cannot be the owner of a SLAC laptop, so some SLAC employees have interns' computers in their name.

Requiring ALD approval for a laptop and a deskside seems overly restrictive, even draconian.

You mention the iPad as a mobile computer. It definitely has its place but I think the jury is still out as if/when it can fully replace a computer with keyboard, large screen(s) etc.

Comments from Gary Buhrmaster

There is a large list of (unintended) consequences to the proposed policy, and a large list of related issues (such as this one). [The posture child for such policies was the cell phone policy, but this one certainly has the possibility to take a new leading role.]

Comments from Antonio

... how many network ports does one get? One per person?

Comments from Yee

- I would also stress that many users like to have a multiple display environment. whilst this is possible with laptops, it may incur extra costs compared to a desktop (eg external graphics card to drive high res displays etc)
 - With a docking station it appears fairly standard nowadays to support 2 displays
- the other thing is that it would be very useful to have docking stations for laptops to ease the integration into a desktop environment. however, certain types of laptops (eg apple) do not sell official ones. also, one should probably still purchase mice and keyboards adding to extra costs.
 - Docking stations are very important.
 - Some people (not all) will want separate mice and keyboards. There are quite a lot left over from decommissioned machines etc. I believe they also have a longer lifetime than the computers.
- if a user's "sole" machine breaks down, what is the expected downtime? how much productivity will be lost? will desktop admin's SLA's be beefed up in order to reduce this 'productivity outage'
 - I suspect a small stock of loaner laptops for such eventualities would be needed
- i, and many others in the group, run virtual machines for testing and evaluation on our desktops. whilst it's fine to also run them on our laptops, we may want to keep things running whilst at home. does this mean that we shall/should get server space to run such environments on? who pays for that?
 - This is true but I do not believe it is a large fraction of the people
 - If possible placing them on centrally managed servers in the data center would simplify cybersecurity requirements (e.g. not proliferating special ACLs to allow access to the servers)
- i think you have pretty much everything :) although the list makes it sounds like everyone will just want really expensive laptops (which is true, but a hard sell for the accountants)
 - Indeed, there is no free lunch
- i also wish to clarify that this is only in respect to SLAC owned machines... that we are free to pay bring in our own laptops, ipads etc....?

Comment from Les

Laptops have WiFi built-in so this should reduce the demand for number of wired taps in offices and number of switch ports. We could think of birthright of 2 wired taps person or even 1 with VoIP phone on one tap and the desktop behind it. People could use wireless and use the one tap for a wired connection if needed. Also as we go to soft-phone maybe get rid of the one tap as birthright.