July 31, 2008 – Fixing Mac OS X AD LDAP Searches for Performance Gain

IT Services has researched a performance issue relating to Mac OS X 10.5 systems that are members of the Windows Enterprise Domain. This performance issue affects both the Windows domain controllers and the Mac OS X system itself.

The issue causes a CPU-intensive serial search of Active Directory (via LDAP) of all computer objects in the Windows domain, looking for the client system's MAC address. However, nothing has ever filled in the MAC address attribute in AD (including the Mac OS X systems themselves when they join the domain). This results in each system doing repeated searches of about 18,000 computer objects with zero results returned each time. Such searches place unneeded load on both the Mac OS X system and the domain controllers.

Apple is aware of the issue. Until Apple fixes the problem in a future release of Mac OS X, IT admins are encouraged to alter the system configuration of their Mac OS X 10.5 systems so that this search is not performed. IT Services has developed an easy to use script to make this change, available here:

http://tech.ait.iastate.edu/macosx/how-to/fix-AD-LDAP-search.shtml

All Mac OS X 10.5 systems that are members of the Windows Enterprise Domain are encouraged to make this change.