

Engineering³ Workstations

A) Hardware

SolidWorks is the driver. Configuration needs to meet SW requirements.

A great reference to SolidWorks requirements is here:

http://files.solidworks.com/partners/pdfs/WP_PARTNER_BOXX_Maximizing_SolidWorks_Performance_ENG.pdf

B) Save to Where (and where not)?

I set up all student accounts to save to a network drive. The cloud does not work well because of the size and complexity of SW Assemblies and linked files. The check-out time eats up too much of class time.

Having student saved files on a network drives allows for login at any terminal so if a specific workstation goes down the students are not stuck.

C) Set the Environment or Allow Students to be Free?

I remember the days when students would (as deviates or accidentally) change settings on computers, lock drives and more creating time waste issues for IT staff and teachers. From these experiences I started locking up workstations to allow exactly what I wanted students to do and nothing else. There is a lot of hard work to keep updating Group Policies, et. al. with changes in OS, added software. Are there easier methods?

To create a default desktop, I like the ForensiT User Profile Manager

<https://www.forensit.com/desktop-management.html>

D) Stop Students from Saving to the Local Drive, Making other changes, Etc.

I've used several methods to keep students from saving locally (i.e. Group Policies) but SW must be able to write to the C:/ drive so some Group Policy set-ups cause SW to be slow. I've also used Group Policy to stop right-click access from the desktop and more to keep them away from making changes to workstation settings. All of these efforts are involved so I'm now looking into an app like DeepFreeze which will clear anything saved locally AND reset all the desktops, et. al. to a defined starting point with each reboot. With DeepFreeze, if there is an

issue because of a student miff just restart the computer and all is back to the way you “froze” it.

The issue with DeepFreeze is set up time, especially if each user is unique and there are lots of them. If the workstations are 'frozen" prior to login of the accounts, then each login will force 'preparing your desktop' to repeat. To avoid this the workstation needs to be “thawed”, then the logon, then logoff and “frozen” (so there are no local saves, changes, etc. while students are using the computer) and then the process repeated as each new class comes in and gets on the computers for the first time. This may also force resetting of SolidWorks and other apps each logon.

Note: I have not tried this, but ForensiT may solve all this as each user will get a default, pre-set user interface so it may be a moot point. Once I test this I will edit this document with the results. Fingers crossed the default user can be set in ForensiT and then the workstations “frozen” with DeepFreeze and we will have a simple solution to managed workstations.

DeepFreeze does not prevent saving locally so students may still automatically save to their My Documents, the Desktop, other; but once the computers are restarted anything saved in these locations will be wiped. Once students learn anything saved locally will be gone next day they will be diligent about saving to their network drive.