

Web-Based PC Installation Checklist and Inventory System
CISC 499 Project Proposal
by Richard Linley

Here's a nice little project for someone who wants to gain some experience with developing Web-based applications.

I install and configure Windows and various applications programs on PCs for grad students and faculty members in the School of Computing. Every time I do this, I print out a paper form on which I record things like the name of the PC, its static IP address, its hardware (MAC) address, its serial number, the names and IDs of the principal users, the (initial) location of the PC, the initial installation date and so on. The form also has a list of setup tasks with check boxes which I tick off as I do things like patch the OS, join the PC to the domain, install antivirus software, and so on.

Since I started keeping track of the School's PCs in the fashion described, about half a dozen years ago, I've accumulated hundreds of the forms in a big binder where they are filed alphabetically by name. As Windows has mutated (my first installations used Windows NT), so has my form. I've added, changed and (less often) deleted items on it over time. This paper inventory has worked reasonably well for me, but there are some problems with the system:

- Because the PCs are alphabetized by name, if someone with administrative privileges on a PC decides to rename it, I can't easily find its record (by checking its serial number, for example).
- I've had to migrate to ever-larger binders as the number of PCs on record grows. (I know that many of the PCs are long defunct, but it's hard to check which because I can't get a listing sorted by installation date.)
- If a faculty member comes to me and asks, quite reasonably, "How many PCs do I own?" I couldn't tell her without a linear search through the whole binder. (A couple of profs have given their computers names associated with themselves, like AKL1, AKL2, and so on, but they are in the minority. Most choose names from all over the alphabet.)

These problems, and others, would be eliminated if my binder full of printed forms were replaced by a Web-based database with a nice front end, an easily reconfigured collection of tables and fields, and some flexibility in data retrieval and reporting. That, in a nutshell, is the project. Details are negotiable.