Storing Images on D: drive: where DOS meets Innovation

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Within the Business Computing discipline, we teach a variety of operating systems. One way to accommodate the practicalities of this is to regularly change the operating system on each PC in a classroom. This poster displays one technique for doing this.

The solution uses a number of DOS batch files, and the Kiwi developed 'Ghost' software, now used extensively throughout the world, since being purchased by American company Symantec. Ghost is at the forefront of the cloning model of software distribution. This model relies on a having an 'image' of a drive, which is written onto the computer as required.

Whitireia Community Polytechnic has two network labs, and a server room, administered by the School of Computing. The author is responsible for ensuring these rooms are available to handle a wide range of courses. In these rooms, students can be given a reasonably free hand to experiment with software on a PC, alter whatever settings they wish (or are instructed to!), without the constant risk of stopping the machine from working for someone else. A number of standard images are stored on the D: drive of each PC. A tutor, or technician, can re-image an entire room in less than 10 minutes, and be confident each PC will behave in the same way it behaved during the last class. All images are backed up on to a CD, and the entire system is maintained by copying files across the School network, which links the rooms.

DOS batch files play a critical role in supporting this model. It is DOS batch files which make it easy for the room to be re-imaged. DOS batch files enable students to back up their work, and when changes are required to an image, or machine configuration, DOS batch files can be used to automatically copy required files to each PC in the room.

The poster demonstrates how this system works at Whitireia Community Polytechnic. It can be viewed from a range of different levels – for those interested in the technical details, or for those who simply want a broad overview.

Students often complain at having to 'learn DOS'. Whitireia students can see by this example that DOS is still required as part of an innovative 21st century networking solution.