Poster paper

PXE – Magical little creature who will start your computers

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Floppy disks can be a slow, noisy, unreliable, pain. An alternative is to boot your computers using PXE (pronounced 'pixie'). In the early 90's we had Novell Boot ROMs. These were the solution for desktop computers that needed a standardised, secure, environment. A computer would start up, download a file from a (Novell) server, and treat that file as though it was a floppy disk, using it to start the computer, and running whatever (DOS-based) software its masters decreed.

During the late 90's the concept returned. This time it has an 'open standards' label. We have driven PXE with Windows, Netware, and Linux servers. It uses TCP/IP protocols, and is as 'standard' as anything else in our industry is.

This poster outlines the benefits of PXE, showing the various open systems layers and protocols used. It also demonstrates how a Linux server can sprinkle a little magic PXE dust over a PC, which will turn itself on, and run the software you have told it to, all without human intervention!

This is an excellent example of the benefits of open systems:

- the server can be built on any of the platforms listed
- the image used to boot the computer can, likewise, be created in DOS or Linux
- software run by the image can be used to create a variety of environments

There are a few 'gotchyas', so we will present a matrix of combinations with which we have had issues, including solutions!

This poster will introduce an alternative way of starting up your network lab PCs. PXE may offer you a chance to add innovation to your computing practise.