PXE Booting with gPXE Gareth J Greenaway

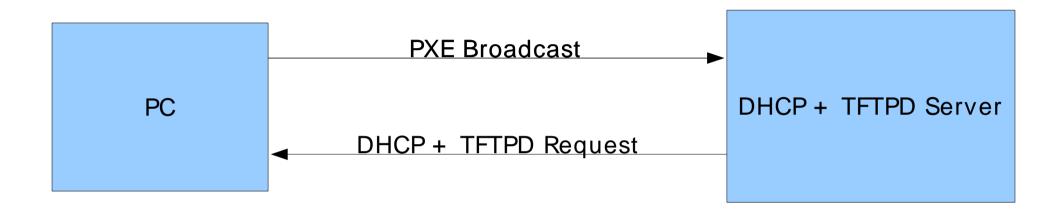
What is PXE?

- Preboot Execution Environment
 - An environment to boot computers using a network interface independently of available data storage devices (like hard disks) or installed operating systems.

Requirements

- DHCP Server configured to support PXE boot.
- TFTP Server
- Syslinux
- Boot images

How it PXE works?



gPXE

An open source (GPL) network bootloader.
It provides a direct replacement for
proprietary PXE ROMs, with many extra
features such as DNS, HTTP, iSCSI, etc.

Why gPXE?

- Not all computers support PXE boot.
- gPXE supports many features that proprietary ROMs do not support.
- Allows booting from USB, CD, Floppy and chain loading from existing proprietary PXE Rom.

Features

- Booting from HTTP
 - HTTP Servers scale better than TFTP servers
 - Do not suffer from size limits
 - Boot from servers not on the local LAN.
- Limited scripting support
- Ability to boot from a SAN, eg. ISCSI or AOE

gPXE in Action