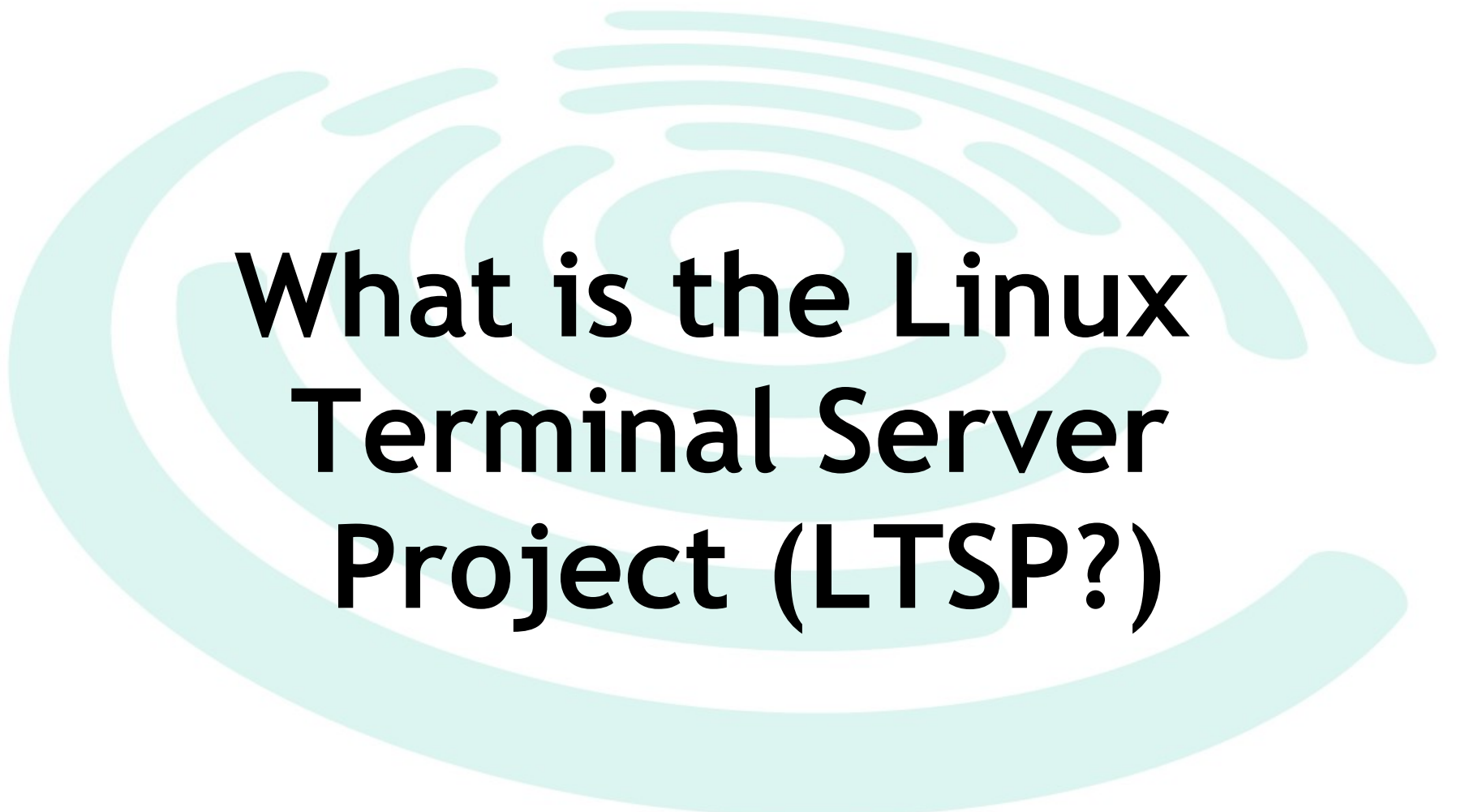# Bristol Wireless & the Linux Terminal Server Project (LTSP)

Bristol IT Megameet

1st June 2012

Bristol Wireless & the Linux Terminal Server Project (LTSP)

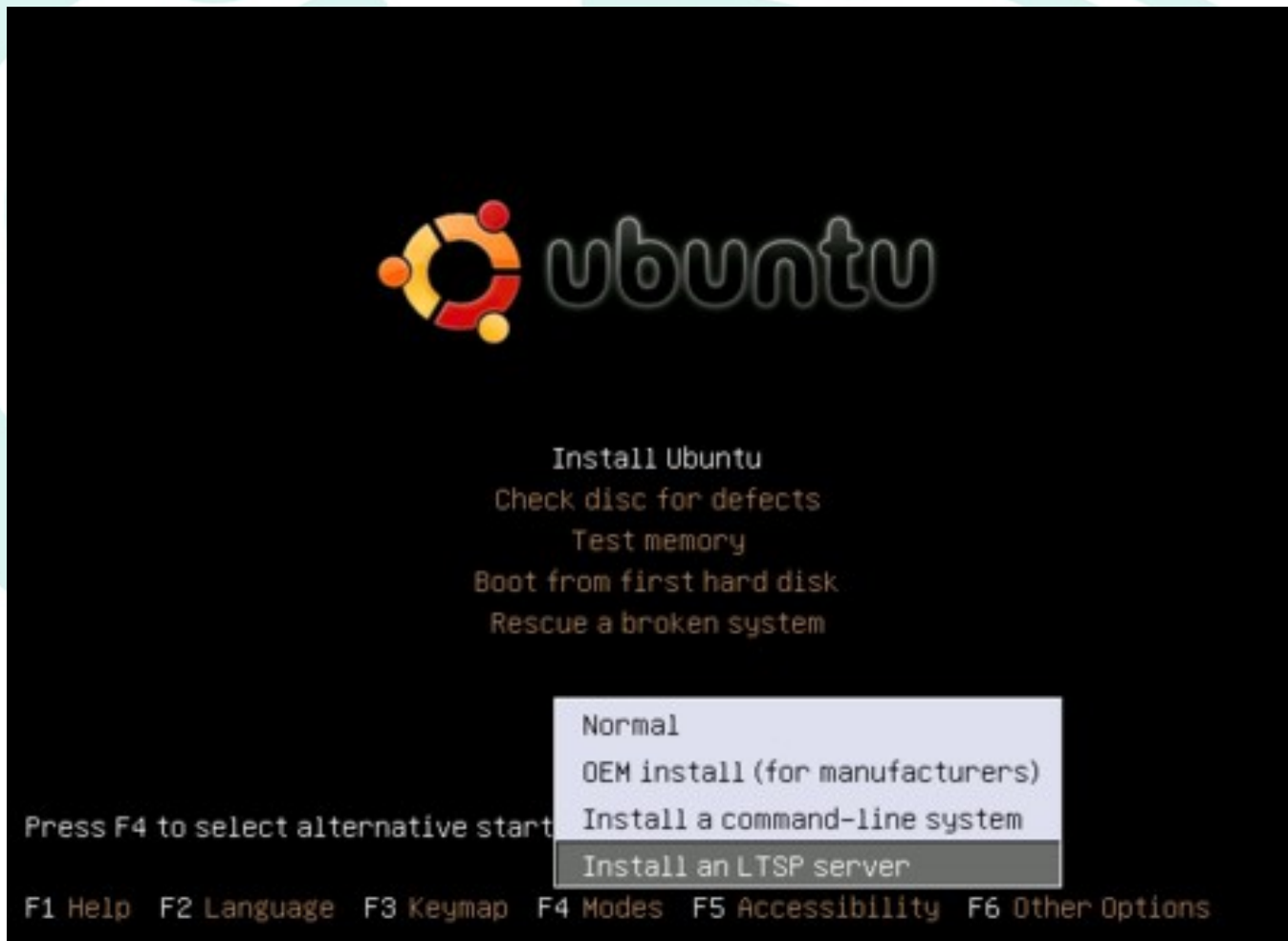# What is the Linux Terminal Server Project (LTSP?)

Bristol Wireless & the Linux Terminal Server Project (LTSP)

The *Linux Terminal Server Project* is a software package that allows many people to use the same computer simultaneously.
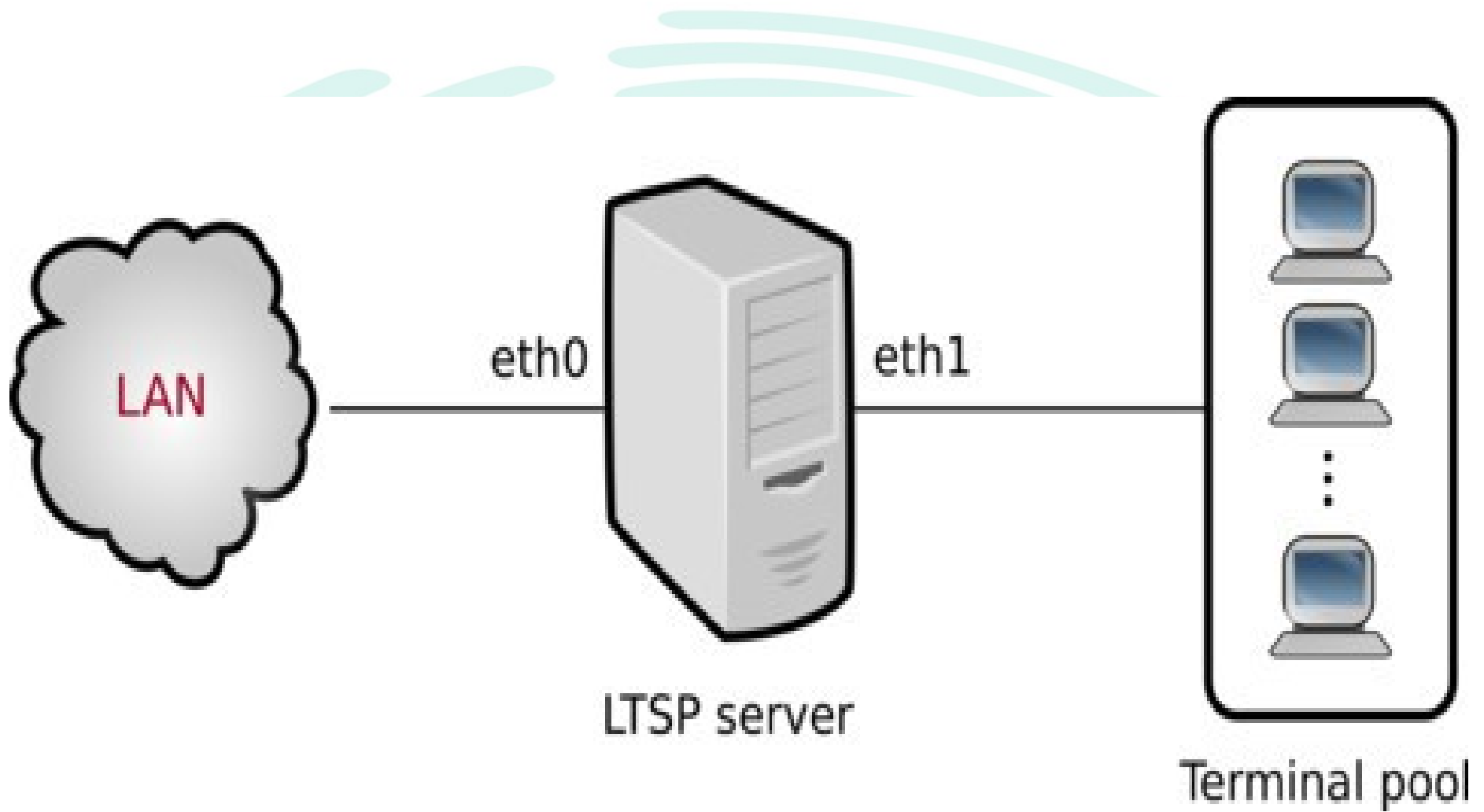
LTSP is a flexible, cost-effective solution that's enabling schools, businesses and all kinds of organisations around the world to install and deploy desktop workstations easily. Some Linux distributions include LTSP ready and working out of the box.

Bristol Wireless & the Linux Terminal Server Project (LTSP)

Ubuntu Alternate offers LTSP as an installation option

Bristol Wireless & the Linux Terminal Server Project (LTSP)

LAN

eth0   eth1

LTSP server

Terminal pool

Bristol Wireless & the Linux Terminal Server Project (LTSP)

Server requirements:

• Minimum 256 MB memory per client; e.g. server with 20 clients will need 4 GB
•2 GHz processor OK, 3 GHz better, dependent on use
•If more than 20 users (clients), it is recommended to use Gigabit Ethernet connected to a gigabit port on a switch for your LTSP server(s).

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Thin client requirements:

- Must be bootable via PXE
- CPU 533 MHz or better for acceptable performance
- RAM minimum 48 MB, 256 MB recommended (helps speed up clients)
- Graphics anything with more than 16 MB memory

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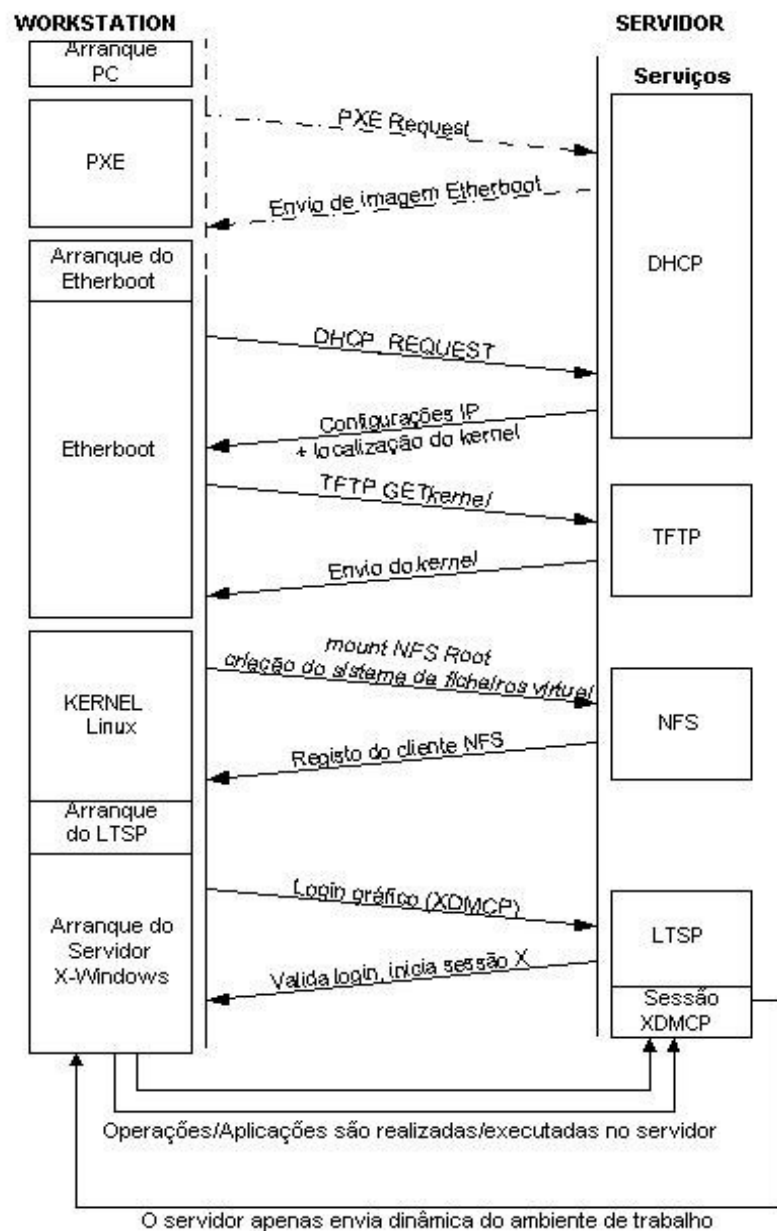
Thin client requirements (cont'd):

- Thin clients can be either desktops or laptops or bespoke
- No moving parts (optical/disk drives) required

Bristol Wireless & the Linux Terminal Server Project (LTSP)

There are 4 basic services required to boot an LTSP thin client. They are:

- DHCP
- TFTP
- NFS or NBD
- SSH

Bristol Wireless & the Linux Terminal Server Project (LTSP)

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Implementation examples

Easton Community Centre

Bristol Wireless & the Linux Terminal Server Project (LTSP)

Implementation examples

Mobile LTSP at Ragged Hedge Fair, Gloucs.

Bristol Wireless & the Linux Terminal Server Project (LTSP)

Implementation examples

Mobile LTSP at Bridgewater Hall, Manchester

Bristol Wireless & the Linux Terminal Server Project (LTSP)

Benefits

- Only 1 machine (server) to administer
- Low energy consumption (does everyone *really* need a huge energy-hungry desktop?)
- Our 22 seat mobile suite can run happily off 500W power supply furnished by renewables
- Linux = no licensing fees and full range of software available

Bristol Wireless & the Linux Terminal Server Project (LTSP)

Ideal for

- Educational establishments
- Voluntary & community organisations
- Costs-conscious businesses of all sizes (LTSP is scalable)
- Communal housing schemes
- Public access internet suites
- Bristol Wireless has been using LTSP for 11 years (since its inception)

Bristol Wireless & the Linux Terminal Server Project (LTSP)

Thank you!

Steve Woods
Company Secretary, Bristol Wireless

woodsy@bristolwireless.net
http://www.bristolwireless.net/
Twitter @wood5y
Bristol Wireless Twitter @BristolWireless