Focus on Wireless Networking Wireless LANS

There is an alternative to drilling holes in walls, fitting hundreds of yards of cable duct and crimping network cables: Wireless networks can be set up to connect desktops and laptops throughout the whole house to the internet without all that expensive building work. BY DANIEL COOPER AND BENEDIKT HEINZ

f you are looking for stress and drill free networking, wireless LAN is the magic word. Insert a few cards, set up a couple of access points and your network is up and running - no need to ask the landlord or the owners' committee. Whether you need to cover just your own flat or the whole floor, bridge the network to the house next door, or even to the corner of the street, the range will depend on your location, aerial, the data rate, and frequency page 19 and the following pages will give you an overview of the current standards, interoperability issues, and potential gains.

Setting up a wireless LAN for Linux is not as easy as one might wish. Manufacturers fail to provide driver support, and there are no Linux based administration tools for access points or access routers. It is a familiar scenario – the community once again has to produce drivers with little help from the industry. Refer to the article starting on page 25 for details on the driver requirements for your cards and tips on the installation procedures.

Cover Story

Wireless LAN Hardware21 If you want to know what the requirements for a wireless LAN are, then read on.

Wireless Drivers......25 A guide to the configuration work you need to get a wireless LAN card up and running.

OpenVPN.....**28** Use an encrypted tunnel to protect your data and provide a secure solution. Page 21 provides details on a few select WLAN components for which we were able to locate Linux drivers, or that provide browser based configuration facilities. This section also features a global first, a combination of network storage, 4 port switch, wireless access point and DSL router.

The main problem with wireless networks is the fact that they are so easy to sniff. An experienced hacker may need only a few minutes to crack the hardware based encryption facilities. This prompted us to include a step-by-step guide to secure communications in wireless LANs (page 28) with tips on protecting yourself against attacks.