

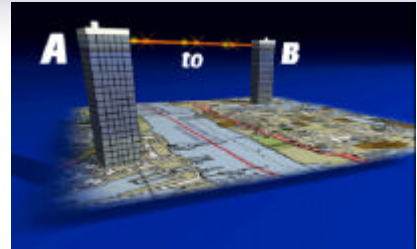
Cablefree Solutions Limited

Leaders in Free Space Optics

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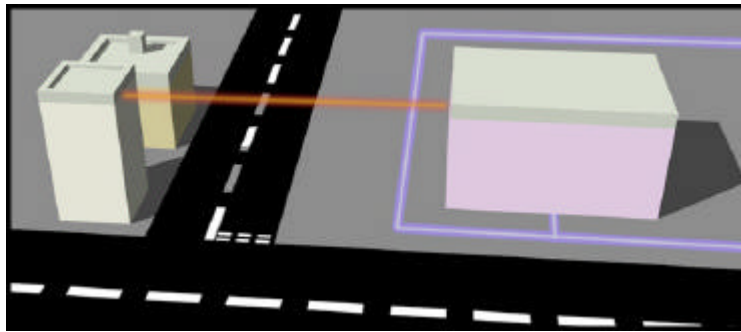
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Application Note No. 9

Cablefree provides Backbone Internet Connectivity



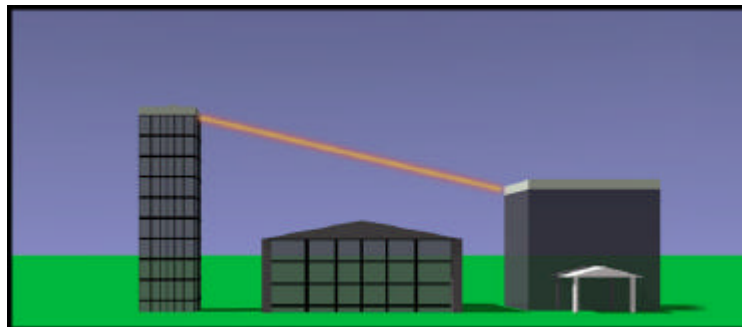
The Scenario:

Internet service providers frequently have to connect separate buildings on industrial estates, science parks and university campus environments which may be separated by roads or other obstacles, where provision of communications links is a frequent problem.

Traditional connectivity solutions for links between buildings include leased-line, fibre-optic, copper cable or microwave links – but all of these have associated penalties.

Cablefree systems use optical technology to offer a number of advantages:

- No site or frequency licenses unlike radio or microwave systems
- No disruption from trench digging - roads, rivers or railways are no obstacle
- No risk of interference, signal reflections or airport radar systems
- No leased-line rental or connection charges
- No limitation on bandwidth – up to 1500Mbps with current technology
- Quick to install
- On-site upgrades ensure 'future-proof' network provision
- Permanent or temporary use, medium-term leasing options also available
- Cost-effective solution



Microsoft Exhibition, Nice (France) - July 1998

Cablefree Solutions was approached to supply a communications link to provide a 10Mbps Internet connectivity link at the prestigious Microsoft exhibition at Nice, France.

The requirement to connect 10Mbps between buildings could not be met by Spread Spectrum wireless, with a 2Mbps aggregate bandwidth. Conversely, a Telecoms leased-line was non-viable owing to the lead-time, high cost and short duration of the show. A microwave link would have been problematic with reflections from the tall, metallic-clad reflective buildings concerned.

Cablefree was the ideal choice - a system configured with a 10Base-T interface for communication at 10Mbps allowed connection of up to 2,000 computer terminals simultaneously, with a simple installation spanning 650m of free space between the main two buildings housing the exhibition.

The high reliability and uniquely flexible nature of **Cablefree** gave the client dependable communications despite harsh operating conditions and non-ideal installation positions - whilst solving the short-term need well under budget and ahead of expected timescales, and without licensing issues or excessive rental charges to pay.

Systems available:

Cablefree 622 for voice & data connectivity up to 622Mbps, range up to 2km

Cablefree Access for SDH or PDH connectivity up to 155Mbps, range up to 4km

Cablefree Gigabit for Gigabit Ethernet and Fibre Channel up to 1000m

Data formats supported:

E1/G703 2.048Mbps • E2 8.448Mbps • E3 34.368Mbps • STM-1 & STM-4 •

Ethernet 10, 100 & 1000Mbps • ATM-155 & 622Mbps • Token Ring • FDDI •

Fibre Channel • Broadcast Video and CCTV •

Multiplexed 10+2, 100+2 & custom solutions available

For more information, please contact CableFree:

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