Fibre to the Desk

Protocol™
Network Integration

"A SMALL STEP FOR MAN, A GIANT LEAP FOR MANKIND"

For more than a decade, fibre has been utilised for campus and premises wiring, but cost factors and other concerns had stopped the horizontal migration of providing a fibre to the desk solution.

Computer processing speeds have increased 100 times and memory capacity has increased 1000 times in recent years, enabling software developers to introduce full motion desktop video-conferencing, multimedia, whiteboards and other bandwidth-hungry applications. Lan's, and those who maintain them, are feeling the strain.

IT Managers are always caught in the middle. They're constantly trying to deliver the latest killer applications to a growing list of users on a tight budget. They're wrestling with corporate growing pains; grappling with constant user moves and changes.

Today, a typical Lan runs at 10 megabits per second (Mbps). Protocol Standards such as 100 Base-Fx and Gigabit Ethernet™ are already developed. Asynchronous Transfer Mode (ATM) will soon enable multimedia transfer beginning at 155Mbps, and soon, 3 Gbps capabilities for a seamless integration of data, voice and video.

A fibre to the desk solution will allow IT executives to create an environment that fosters greater productivity, network managers can provide users with applications that will push the standard limits of conventional cabling systems, and end-users can create whatever imaginations will allow today.

People want to access information quickly, fully and completely. Companies want to deliver their mission-critical information to its employees and allowing them in turn to make intelligent decisions in the same manner.

Imagine the possibilities, making even the most advanced software applications available to the entire staff over a Lan. Multimedia to train the sales staff with product demonstrations or imagine providing the technical service staff with real time product repair instructions. Full motion video conferencing to link the main office with its satellites, data conferencing for investment companies and other financial institutions.

It is a known fact that today's most progressive entrepreneurs list their information delivery systems as one of their most valuable corporate assets.

Fibre to the desk is bringing the benefits of fibre optics to the World's Lan's through its breakthrough economy, robustness and simplicity. It will transform how information is created, assimilated, presented and transferred. It will change how people interact in the work place and will change how business does business.

Fibre Facts:

- If all the installed fibre were strung together end to end, it could reach from earth to the moon and back almost 30 times.
- Although thinner than a strand of human hair, inch for inch, fibre is stronger than steel.
- One square inch of optical fibre suspended in air could support 216 six-ton elephants.
- You could transmit three episodes of your favourite sitcom to a friend in less than a second.
- Two optical fibres can transmit 24,000 phone calls at the same time.

FIBRE VERSES COPPER "Round 1"

ANSI/TIA/EIA – 568A Standards limit copper cabling to 100 meters for cross-connects. Rated at 300 metres, fibre is the only medium to deliver both high bandwidth and low signal attenuation in a centralised network. You can run fibre cable from the desktop to the main cross-connect, skipping the traditional copper backbone from the telecommunications closet to the equipment room.

All electronics in a fibre optic network can reside in one location, a passive interconnect in the equipment room. Maintenance and trouble-shooting are simplified. Speed upgrades are easy, no more empty grounding requirements.

FIBRE – "Proof in the pudding"

Just how much can be saved through the relocation of telecommunications closets?

IT executives at George Washington University in Washington DC were very surprised by the answer. George Washington University was one of several beta sites. The fibre to the desk solution reduced their closet space by a factor of ten, from 140 to 14 closets. The reduction in closets within the University lead to a comprehensive audit of reclaimed floor space, electrical requirements, HVAC, fire detection devices and security costs. The conclusion of the audit was a realisation of reclaimed floor space with an average cost of £275.00 per square foot.

FIBRE VERSES COPPER “The Knockout punch”

Enhanced Category 5, Category 6 and Category 7 are staring you in the face; so is the migration from 10Mbps to 100Mbps and to Gigabit Ethernet.

Your planning to invest in new computers and new equipment, given that cable system upgrades or rewiring can cost up to 140% more than the systems initial installation, do you really want to plan on re-investing in new cabling system each step of the way?

IN CONCLUSION – THE FUTURE / TODAY

Fibre to the desk initial cost is half that of a traditional copper solution, as the bandwidth needed to meet 1000Mbps, Gigabit and XGigabit transmission speeds will require upgrading the traditional copper solution once, twice and possibly more.

Fibre can provide the bandwidth necessary to guarantee a resilient and futureproof network infrastructure which will allow IT executives to focus on implementing bandwidth-hungry applications and not the next cable upgrade.