Why Wireless?

Debunking common myths so you can
choose wireless with confidence.

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If you're considering choosing a wireless network over a fixed network for your next project you might be wondering about the advantages and disadvantages of each solution. There are a number of common misconceptions and myths about wireless technology that you may be concerned about, particularly around security, reliability, usability and safety. At SilverNet we want to dispel these myths and highlight the benefits of choosing wireless to help you feel confident in your decision.

Myth No.1 – Wireless isn't secure

In the early days of wireless, manufacturers tried to make it easy for end users by configuring equipment to be ready to go straight out of the box. As convenient as this was for initial set-up, it contributed to the misconception that wireless isn't secure enough due to equipment being set-up using default passwords.

Whilst it is almost impossible to make any network completely secure, modern wireless technology provides highly effective counter measures through the use of complex encryption technology. The encryption standard WPA2 utilises AES 128 (Advanced Encryption Standard). The next iteration, WP3, is even more secure as it operates at AES 256.

Advanced Encryption Standard (AES) is the algorithm for the encryption of electronic data. The differences between AES 128 and AES 256 encryptions are too technical for this document! It is safe to say however that 128-bit algorithm is complex and strong enough to make a cyber-attack ineffective in getting access to valuable information. Experts have reported that AES 128 will be secure and uncrackable for at least the next hundred years or so. AES 256 is even stronger.

SilverNet PRO Range Gen 3 and Gen 4 equipment all come with AES 256 as standard, which is approved for use with government and military data. If it's secure enough for them, it's secure enough for everyone.

Myth No.2 – Wireless is difficult to set up

This myth may stem from reality – back when wireless technology was first introduced it could be difficult for users to set up, as it was brand new technology. In the many years that have passed since then technology has advanced enormously, and with the right tools wireless can easily be set up.

At SilverNet we have a handy configuration tool which makes setting up your wireless network easier than ever. Using SilverView's 'Quick Config' tool you can configure a link in minutes and see real time throughput and performance.

Myth No.3 – Wireless is unreliable

It's understandable why customers may think that wireless can be unreliable – Wi-Fi and mobile reception certainly can be patchy at times due to the nature of its "best effort" design.

But this myth simply isn't true for Point to Point networks, particularly with a well designed and implemented network that will further mitigate the potential for connectivity and reliability issues.

Alternative frequencies are also available, some of which are licensed so you can effectively buy your own spectrum and run fibre through the air. With the correct set-up, efficient planning, and if you follow our "Golden Rules" below then you are sure to stay out of trouble.

SilverNet's Golden Rules of Wireless Installation

1. Always have a clear line of sight for the best possible link quality and to avoid link dropping. Remember that buildings or lorries can cause issues.

2. Avoid trees where possible. Trees absorb the RF signal and can cause any link to drop at random.

3. Make sure to use decent shielded network cables to prevent interference.

4. Never scrimp on network switches when working with video that runs constantly, it isn't worth the money you may save initially.

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We've debunked the most common myths surrounding wireless networks above, but there are still many more benefits to installing a wireless solution. While Fibre Optic infrastructure can be a great, robust solution in urban environments it has several disadvantages when compared to wireless, one of the biggest being cost.

Analysis has shown that between 60% and 80% of the capital cost of a fibre project is due to civil work, ducts and cables. A significant expense of these projects is digging holes and filling them in again. Installing a wireless network system to complement a core fibre network is a cost-effective solution. No time or money gets wasted digging and filling holes during installation, and once up and running the operating costs are low.

Wireless networks are also more flexible. It's quick and simple to deploy initially, and if you find you need to move things around it's much easier to do with wireless compared to a cabled network. Installation of a fixed network takes time and increases project risk, whereas setting up a wireless network can be done quickly, is simple to set-up (especially with the right tools) and involves minimal risk.

In Summary

There are still some common myths when it comes to wireless, misconceptions which no longer hold true. Choosing a wireless network will save you money and time, decrease project risk, increase flexibility, and enable you to gain control over your network.

SilverNet designs and manufactures high performance wireless networking equipment. Whether you require an outdoor wireless or fibre connection for your transmission of CCTV or you need to network a new building to an existing one via a wireless bridge or fibre link, SilverNet has the products and expertise to provide a complete solution.

Our easy to install, configure, and control indoor and outdoor wireless solutions are backed up with outstanding technical support because we believe in supporting our customers every step of the way. Path profiling, on site surveys, system design and a host of other free tools are available to assist.

If you'd like to learn more about the benefits of wireless solutions, or discuss your next project, please get in touch with us using the contact details below.

https://www.silvernet.com/

Tel: 0800 6521629

Email: sales@silvernet.com