

## [White Paper on Wireless](#)

### Wireless networking

The typical working environment has moved away from a fixed PC at your office desk and into the boardroom, the warehouse, the shop floor, collaborating and viewing information as you roam around the office. To take advantage of the benefits of this businesses, need a wireless network that uses radio waves for connection, instead of leads and cables to let devices within a certain area connect and communicate, ensuring you, your co-workers and your customers are always connected.

### Advanced Wireless Networks

Many organisations are now looking to install more advanced wireless networks or next generation wireless to support business processes and real time wireless applications. These advanced wireless networks can support roaming users who require constant uninterrupted connection to the wireless network using a real time application, such as voice handsets or asset tracking and monitoring. Depending on your organisations requirements PW Data Group can provide leading wireless solutions based on your budget and wireless requirements. By assessing your needs we can develop a wireless solution using two differing technology types — Traditional Microcell or a Virtualised Single Channel wireless network.

PW Data Group can provide a range of wireless network solutions depending on your needs and requirements. We have built partnerships with a range of quality suppliers including Aruba, Juniper Networks, Alvarion, Cisco, NETGEAR, , Motorola, and Ubiquity to name a few, to ensure we can design, deliver and support the right wireless network for you.

### Aruba

PW Data Group are a Gold Partner of Aruba Networks, a leading provider of next-generation network access solutions for mobile enterprise networks. With the Aruba Mobile Virtual Enterprise (MOVE™) architecture, access privileges are linked to a user's identity. That means your enterprise workforce has consistent, secure access to network resources based on who they are no matter where they are, what devices they're using or how they're connected.

Aruba offers the most reliable mobile application experience over the fastest scalable Wi-Fi infrastructure on the planet. Aruba 802.11ac Wi-Fi solution for personal and enterprise-owned mobile devices deliver gigabit speeds without overhauling the existing network infrastructure. Aruba WLANs can be deployed with or without Mobility Controllers reducing complexity, time to deliver and most importantly Total Cost of Ownership.

“Bring on the mobile devices”. Aruba WLANs are BYOD-ready and use contextual data, user identity, device type, applications and location to enforce security and QoS policies. And the world's most powerful RF technology enables Aruba WLANs to deliver a predictable Wi-Fi experience in high-density mobile device environments. Personal mobile apps no longer adversely impact the performance of corporate mobile apps that are vital to your business.

## Juniper Networks

For higher enterprise class wireless solution we utilise Juniper's wireless technology to deliver a more comprehensive advanced wireless network. Juniper technology allows us to deliver an evolved wireless architecture that is designed specifically for mobility, with the highest and most advanced levels of reliability, scalability, and security available in the industry.

Juniper's wireless technology is simple to configure and manage, with unified services that lower the cost of ownership, increase user and IT efficiency, and improve overall business results.

Utilising the Juniper range, we can build a high performing wireless network to deliver superior wireless signal quality for hundreds of users, and scale the wireless network across the enterprise beyond indoors, outdoors, and across campuses without compromising security, signal strength and manageability. These wireless networks incorporate embedded location awareness for any wireless device, perfect for industries such as healthcare where location based services are mission critical.

## Cisco Meraki

PW Data Group are Cisco Meraki gold partners.

Cisco Meraki offers high performance Wi-Fi for demanding environments. Wireless networks automatically optimize and deliver superior performance in the highest density wireless environments and under intense interference conditions — without the bottlenecks of hardware controllers.

## Netgear

Our NETGEAR wireless solutions offer a more cost effective option better suited to smaller organisations such as factories, primary schools and small business offices. From single room access to complete building wireless coverage, the NETGEAR range offers high quality wireless connectivity at an affordable price.

The NETGEAR range of wireless access points and controllers deliver secure, reliable, high-performance wireless network coverage to meet today's mobile workforce demands. These powerful devices provide the ultimate in industry standard access to corporate network resources, email and the Internet. With robust security measures, simplified management and configuration, extended range, integrated IEEE 802.3af Power over Ethernet, and WiFi certification, the NETGEAR wireless range brings standards-based enterprise-level functionality at a mid-market price.

## Benefits of wireless networks:

**Cost savings** – It can cost less to operate a wireless LAN as it reduces wiring costs, signals can be sent through walls, floors and ceilings to save on installation costs.

**Security** – It is a secure way to transfer data ensuring your data is easily available but only to the people you allow access.

**Easy to set up** – Easy to transfer and install in new location as you don't have to run physical cables through the location, installations can be quick and cost effective.

**Scalability** – Quickly expand your network, while a wired network would require additional wiring, with a wireless network it is simple to add stations in any environment with existing equipment.

**Productivity** – Employees can access printers, storage devices and networks even when they are not at their desks. People in meetings can access documents encouraging collaboration and saving time.

**Ubiquitous Utility** – Nearly all computers and devices today come equipped with the WiFi technology needed to connect directly to a wireless LAN making it the obvious choice when installing a network.

### Applications of wireless networks

#### Increase mobility and collaboration

Employees can roam around the office and to different floors without losing connection to the network. This allows everyone on team meetings or conferences to access all documents and applications on your network allowing them to work more efficiently.

#### Provide excellent customer service

Customers want quick response to queries and concerns. A wireless network can improve customer service by connecting staff to the information they need. For example, a doctor in a small medical office can access online patient files while moving between exam rooms.

#### Connect hard-to-reach areas

Wireless LANs allow a business to bring network access to areas that would be difficult to connect to a wired network. For example, adding wireless access points to a factory to manage inventory.

#### Easier network expansion

Desks can be moved and new employees can be added to the network quickly without the effort and cost required to run cables and wires.

#### Offer a value-added service

A wireless network allows your business to provide secure wireless access to the Internet for guests such as customers or business partners. Retailers, restaurants, hotels and other public-facing businesses can provide this as a unique value-added service.

#### Keep inventories of merchandise

Warehouse staff can use wireless networks to manage goods, conduct inventory and ship goods to customers, scanning barcodes with a handheld device to keep records.

## Specific applications can be overlaid onto the wireless network to deliver specific applications and additional benefits

As Wi-Fi has become a basic commodity. People require it anywhere and anytime and they want it for free of charge, PW Data Groups enterprise guest / public Wi-Fi solution can be used across all business sectors to monetize your wireless solution and convert a perceived costs to a benefit. Cloud based, the solution provides secure, content filtered access for your visitors. Users can authenticate login using their social media accounts or through a short registration form. Our solution has options for small, single site businesses right up to large multi-site organisations with high volumes of WiFi users

Take a closer look in our Guest/Public WiFi section:

<http://www.pwdatagroup.com/networking-cloud-services/wireless-networks/guestpublic-wifi/>

## What sectors can we provide wireless networks to?

PW Data Group provide a range of wireless solutions to meet the most demanding and challenging environments. We have the experience, technology and the commitment to create the perfect wireless solution whatever the environment.

Some sectors we have worked in are:

### Factory wireless networks

Regardless of factory size, we can accurately plan, install, configure and test factory wireless networks to ensure employees have immediate Wi-Fi access with no signal drop outs or delays.

*View more on factory wireless:*

<http://www.pwdatagroup.com/networking-cloud-services/wireless-networks/wireless-solutions/factory-wireless-networks/>

### Hotel and Leisure wireless networks

This need for continual online access is now playing a role in the decision process when booking hotel accommodation for both business and leisure customers.

*View more on hotel and leisure wireless networks:*

<http://www.pwdatagroup.com/hospitality-wifi/>

### Hospital wireless networks

With the increase demands to improve the patient experience more hospitals are looking towards wireless networks to deliver secure communications infrastructure.

*View more on hospital wireless networks:*

<http://www.pwdatagroup.com/networking-cloud-services/wireless-networks/wireless-solutions/hospital-wireless-networks/>

### Office wireless networks

We can tailor an office wireless network based on the number of users, types of devices and size of buildings to ensure the most cost effective wireless solution for your office.

*View more on office wireless networks:*

<http://www.pwdatagroup.com/networking-cloud-services/wireless-networks/wireless-solutions/office-wireless-solutions/>

#### Schools wireless networks

School wireless is becoming increasingly popular due to the number of educational and administrative benefits it offers pupils, teachers and parents, increasing the entire efficiency of the school.

*View more on school wireless networks:*

<http://www.pwdatagroup.com/schools-ict-provider/>

#### Warehouse wireless networks

Warehouses have utilised wireless technologies for a number of years to manage stock control, sales orders and distribution.

*View more on warehouse wireless networks:*

<http://www.pwdatagroup.com/networking-cloud-services/wireless-networks/wireless-solutions/warehouse-wireless/>

### Why choose PW Data Group?

We offer a consultative approach – we will investigate the business requirements and make recommendations on the choice of technology to fulfil the requirements.

We provide a Site Survey – our physical site surveys will ensure that coverage is achieved, with the right capacity to support the required applications for the least amount of cost.

IP Design – utilising the information in the site survey, our design team can plan and configure the data network to support the solution and include security provisions and integration with existing IT policies.

Installation Services – a complete installation service including data, wireless and electrical installation, testing and configuration, and all necessary qualifications and experiences to work onsite.

Lifetime Support – we can offer a service level agreement based around your budget with timed responses to resolve network problems, and equipment failures in the unlikely event of any network issues.

Regardless of the size and cost of the wireless network you require we have a commitment to you, and ourselves to do things right. We have engineered a process which allows us to provide you with exactly what you want, with 100% satisfaction guaranteed.

We will review your current IT landscape and the way in which your user's access information both internally and from external environments. This will include the types of devices they are using to connect to your network (company and personal) and any priority that needs allocating to certain devices. We will survey the site to allow us to accurately plan and design your wireless network to

ensure 100% coverage for both fixed and roaming users. Once the Wi-Fi is in place, we carry out rigorous tests and configurations to leave you with an easy to manage, scalable wireless network.

We also offer flexibility in procurement on a rental or capital basis. Our solutions can be supported through standard break-fix support or fully managed service delivering you a wireless solution without the hassle of managing it at a fixed monthly costs.

By following our proven approach we are confident in delivering the perfect wireless solutions for any environment. So much so, we offer a 100% satisfaction money back guarantee that the solution will meet the expectations laid out in the consultation.

As a vendor independent supplier we can give you the best possible solution based on your budget and your requirements regardless of your size or technical capability.