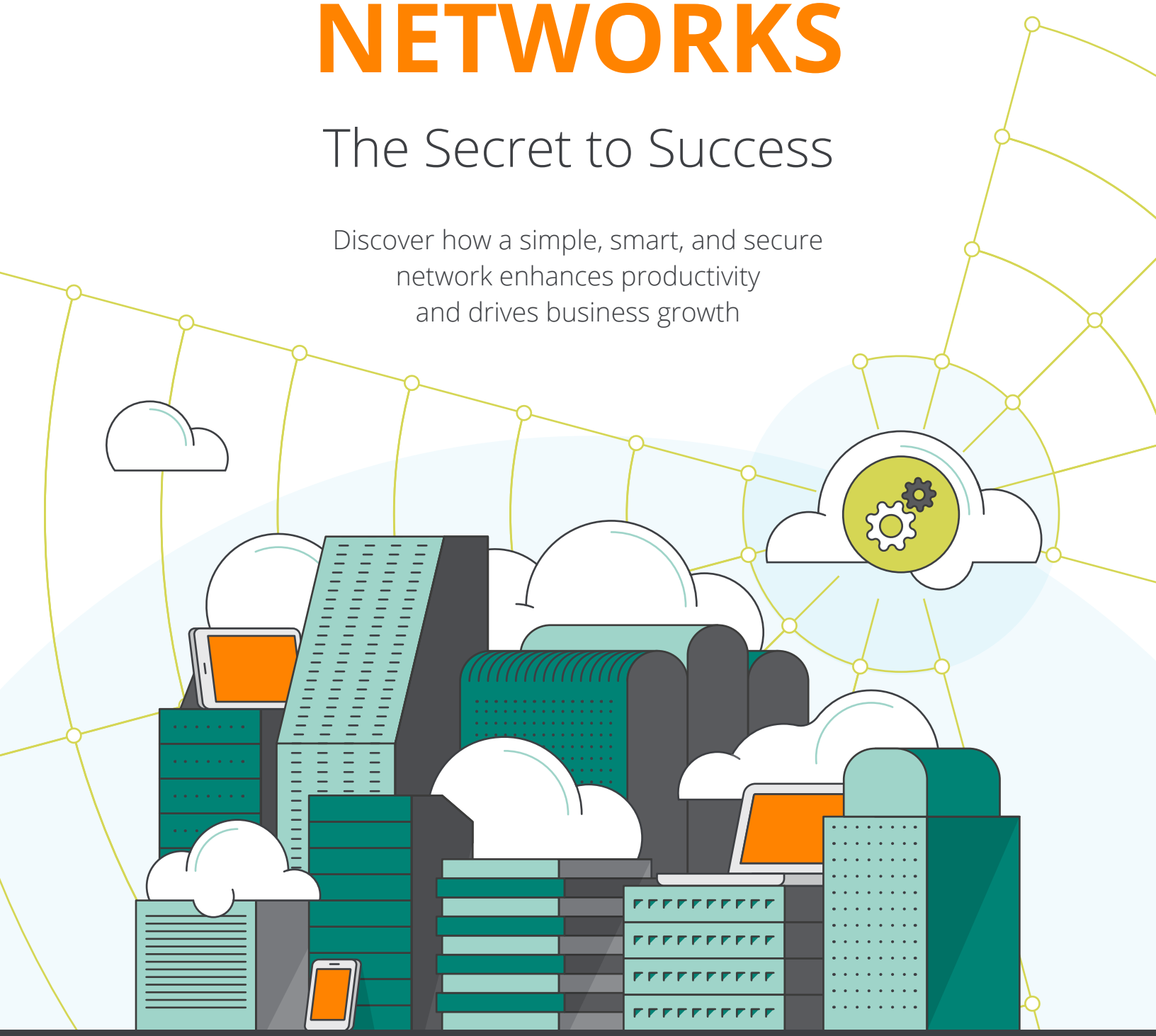
CLOUD-MANAGED NETWORKS

The Secret to Success

Discover how a simple, smart, and secure network enhances productivity and drives business growth



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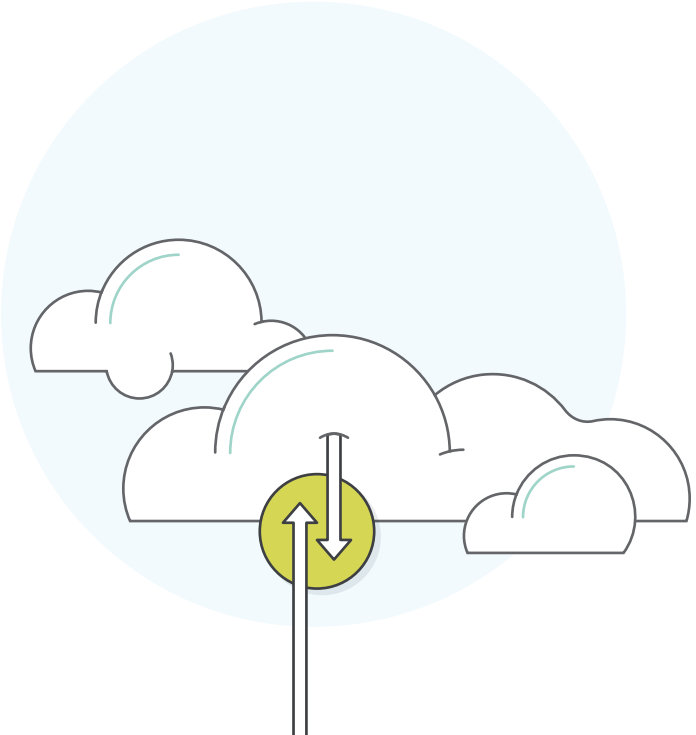
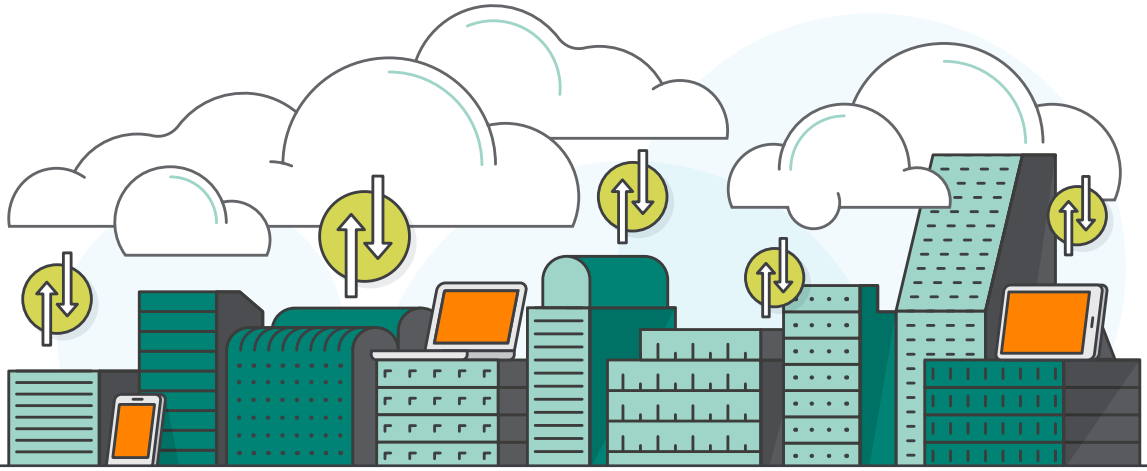
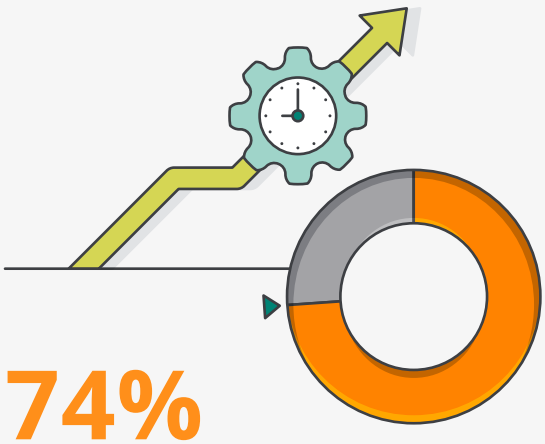




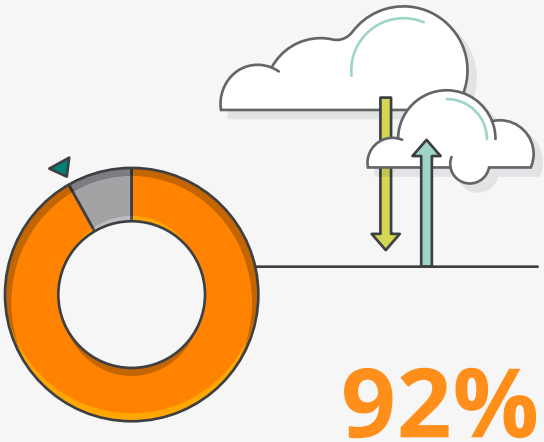
Introduction

In today's digital era, a fast, reliable network keeps your users productive and customers happy. It means your employees can connect and collaborate in the latest ways—via mobile devices, cloud-based applications, and IoT—and respond to customers faster than ever. But ensuring the network performs at its best can be a huge challenge, especially for midsize businesses with limited IT staff and budgets.



74%

of SMBs recognize that mobile solutions **improve employee productivity.**



92%

use at least **one cloud application.**[1]

To stay competitive, midsize business networks must provide the same reliability, performance, security, and scalability of large-scale enterprise networks, but without the same resources. Gartner found that midsized businesses spend 1.5x more on infrastructure technologies than large enterprises.[2] Yet, they must deploy and maintain this technology with limited staff, many of whom are IT generalists.

Meanwhile, technology is changing at a blistering pace. Bandwidth demands continue to climb higher, requiring infrastructure that can carry your needs into the future.

That's where a cloud-managed network can step in and help. It's built around fast, reliable, and scalable Wi-Fi and switching solutions, and has easy-to-use, web-based operations and assurance management. It's the best option for an end-to-end solution that is easy to deploy, includes built-in security, and has the right tools for collecting and analyzing network performance data.

This eBook explores how cloud-managed networking provides midsize businesses with a simple, smart, and secure way to increase productivity and drive business growth. It delivers an intuitive and more satisfying networking experience for every user—including IT, employees, and customers. Learn how it can help your business support IoT devices and accelerate growth, even with a tight budget.

40%

of IT staff will be "versatilists" by 2021. Versatilists hold multiple roles, most of which are business focused rather than technology related. [3]

CHAPTER 1

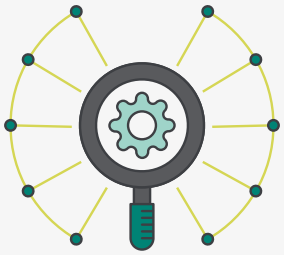
Cloud-managed networks: Simple, smart, and secure

Midsize businesses are embracing technology to gain a competitive edge—using everything from cloud-hosted voice and customer engagement applications to a growing list of IoT devices. Like large enterprises, these businesses run a majority (78%) of their workloads in the cloud.[4] But limited IT resources make it difficult to ensure that their network can securely support increasing demands and changing business goals.

A robust network infrastructure is more important for leveraging cloud services, boosting user productivity, and protecting against cyber-threats.

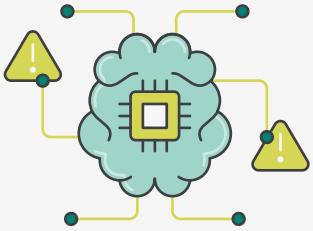
Benefits of cloud-managed networking:

Infrastructure that is easy to deploy with built-in tools to collect and analyze network performance data



Flexible network management solution that can grow with their business

More insight into users, devices, and apps running on the network to ensure it runs smoothly



Intelligence and automation take the guesswork out of troubleshooting and provides guidance on where to focus remediation efforts

Integrated security controls and intrusion detection protect data from malware and unauthorized users

The right cloud-managed networking solution offers simple, smart, and secure network access that just works, without big-company complexity. Enter Aruba Central, built for the cloud and midsize businesses.

With Aruba Central, you can see, manage, and secure your network—including wireless, wired, and WAN infrastructure—with ease. It's ideal for delivering a cost-effective network experience without sacrificing reliability, performance, or security.

Why consider cloud-based network management?

Simplicity

Deploy the network in minutes and manage it from anywhere

Strategic Value

Spend less on hardware, maintenance, and overhead. Get the latest network capabilities without requiring manual intervention

Visibility

Get deeper insights into network health and eliminate time-consuming troubleshooting tasks, so your IT team can focus on other initiatives

Security

Shield your network from attacks and threats, block unauthorized usage, and ensure the appropriate level of access for users

Fewer Complaints

Leverage real-time insights about what's causing network performance issues, to keep users and IT productive and happy

CHAPTER 2

Simplifying network management

With the wide range of IT issues that pop up daily, midsize businesses need a network that "just works." Cloud-managed networking solutions are easy to deploy and maintain with limited IT staff, saving time with easy management, assurance, intuitive dashboards, and limited training required.

Effortless management

Cloud-managed networks often come with Zero Touch Provisioning software for plug-and-play deployment of wired, wireless, and WAN equipment. New equipment can be set up in multiple locations within minutes, and even non-IT staff can install hardware at remote locations. Devices can be centrally configured by IT, and those configurations are pushed seamlessly from the cloud. Your entire network can be set up, configured, and managed from anywhere.

Intuitive dashboards

Cloud-managed networks have intuitive, web-based dashboards for simple network management. You can easily see what's happening in the network, including the experience users and their specific devices have when interacting with apps through your network. Streamlined workflows put the information you need at your fingertips.

Limited training required

With cloud-managed networks, it's easy to set up your distributed infrastructure from a central location—without specialized IT expertise. Non-IT professionals simply plug in equipment at a remote site, and the right configuration is downloaded and applied automatically. Mobile apps and wizards help guide IT staff through the configuration process. Simple reporting features make it easy to share network performance and compliance information.

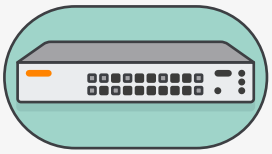
The simplicity of Aruba Cloud networking solutions

Aruba Central

Enables easy management with complete network visibility, intelligence and automation, and security monitoring

Aruba Access Points

Operate in controller-free mode for easy deployment with big business performance



Aruba Access Switches

Deliver fast, flexible Ethernet connectivity—in standalone and stackable versions

SD-Branch Gateways

Enable rapid branch network deployment, intelligent routing of WAN traffic, and policy enforcement

User Experience Insight

Delivers actionable insights and problem details that let you get ahead of problems, often fixing them before users are impacted

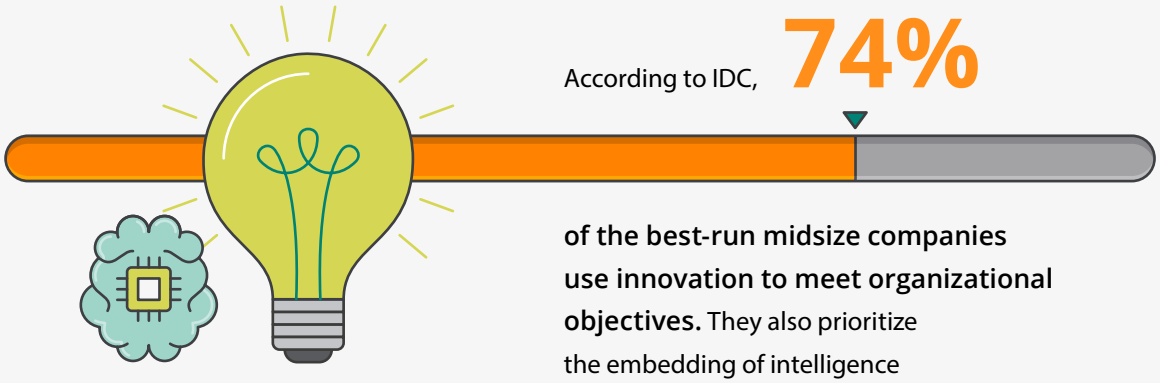
CHAPTER 3

Key features for a smarter network

Cloud-managed networks are designed with key software features that reduce the burden on IT staff, while delivering business-class service, reliability, and flexibility for years to come.

High-quality connectivity

Cloud-managed networks include built-in intelligence to optimize performance automatically. The right solution identifies the source of network bottlenecks and makes smart decisions—so users and applications always have the best service. And since your IT staff will get fewer network-related helpdesk tickets, there's more time to focus on strategic initiatives. Cloud-managed networks take the guesswork out of troubleshooting—on WLAN, LAN, and WAN.



According to IDC, **74%** **of the best-run midsize companies use innovation to meet organizational objectives.** They also prioritize the embedding of intelligence into their operations. [6]

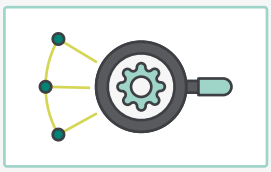
Network reliability

Cloud-managed networks ensure "always on" connectivity. Visual RF display technology helps you detect and react to changes in your environment, which is useful for resolving coverage gaps. The latest access points come with self-tuning features to keep devices connected—regardless of where they initially connected or if they're roaming. Automated failover features help provide continuous availability.

Pay-as-you-grow

Cloud-managed networks are designed to help you do more and spend less. You can reduce overhead and spread costs over time, using a "pay as you grow" model to put your limited budget into the areas that need immediate attention. In addition, your investment is protected. There is no need to rip-and-replace all your management hardware. Also, you can use network insights to identify where to add services, such as guest Wi-Fi, for better experiences.

Smarter network management with Aruba Central

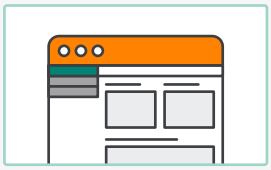


Automated System Monitoring and Troubleshooting

Monitors how things are working, and alerts you to the cause of issues and how to fix them before users have problems

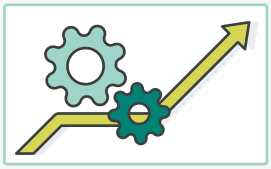
Visual RF Display

View wireless coverage across the organization, streamlining deployment and troubleshooting



Easy-to-use Dashboards

Provides Wi-Fi presence analytics, connectivity health, and application filtering and usage insights for 3000+ applications



Performance Tuning

AI-powered intelligence and assurance ensures the best AP connectivity (ClientMatch), and adaptive radio management (ARM) provides high-quality Wi-Fi with minimal manual intervention

Moving up to Wi-Fi 6

Wireless standards are evolving to meet growing performance demands, and Wi-Fi 6 (also known as 802.11ax) is the latest. Wi-Fi 6 is designed to boost performance in high-density areas, from device-packed environments to stadiums and hotels. Upgrading to Wi-Fi 6 helps future-proof your business, enabling faster throughput for dense client populations, anticipated growth, new IoT applications, and more.

Are you ready for Wi-Fi 6? Consider these deployment tips.[7]

Wi-Fi 6 offers 4x faster data transfer speeds—up to 40% higher than Wi-Fi 5 (802.11ac) for a single client device. Plus, it helps extend the battery life of mobile and IoT devices.

Look for a **"Wi-Fi 6 Certified" logo** to find APs that have gone through the Wi-Fi Alliance's certification process.

Wi-Fi 6 APs should support WPA3 andEnhanced Open for more secure connectivity.

If IoT is an issue, **Wi-Fi 6 increases speeds even** for these devices on 2.4GHz networks.

Premium Wi-Fi 6 APs need a lot of power to support Intelligent Power Monitoring (IPM) features, which could require more expensive hardware.

CHAPTER 4

The right security for midsize business

Cybersecurity threats are constantly evolving, and midsize businesses are highly attractive targets. Cloud-managed networks need to provide comprehensive security features to shield the network from attacks and intrusions, prevent unauthorized usage, and integrate with best-in-class security solutions—for trusted protection at multiple points across the network.

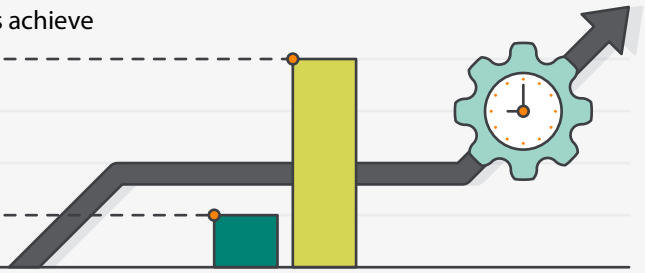
Comprehensive protection

Cloud-managed networks need integrated security controls and intrusion detection to help protect your data and infrastructure. Remote Access Point Intrusion Detection Service (RAPIDS) identifies risky APs and network attacks—and allows your IT staff to configure automated responses. For access control, multi-tiered policy enforcement helps ensure only authorized users, devices, and applications can access different parts of your network. Connectivity privileges can be defined for employees, guests, and IoT devices.

Cloud-managed networks should integrate seamlessly with advanced security solutions for two-factor authentication, next-generation firewall features, and more—so you can confidently protect your network from emerging threats. Research if vendors are known for Wi-Fi security innovation and are certified in the latest Wi-Fi security standards. For example, Aruba security experts were instrumental in developing these new encryption protocols used in WPA3 and Enhanced Open, and was the first company to obtain WPA3 certification.

In an IDC study, the best-run midsize companies achieve

4x higher



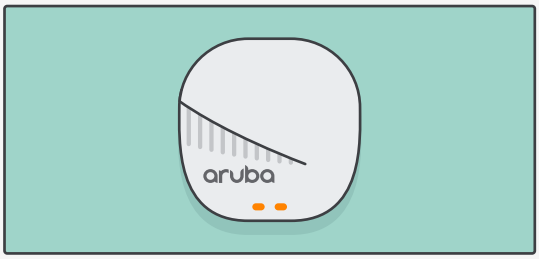
employee productivity than their lowest-performing peers.

They also use technology more frequently to foster internal and external communication and collaboration. [6]

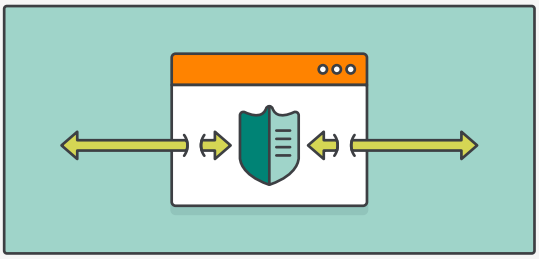
Robust access control

Cloud-managed networks have granular identity-based access control, so your IT staff can ensure the right people have the right level of access. Intuitive workflows make it easy to configure permissions, responsibilities, and privileges on the fly. Built-in policy enforcement firewalls allow for the smart separation of devices and traffic, without requiring additional hardware. Web content filtering blocks unauthorized access to content and websites.

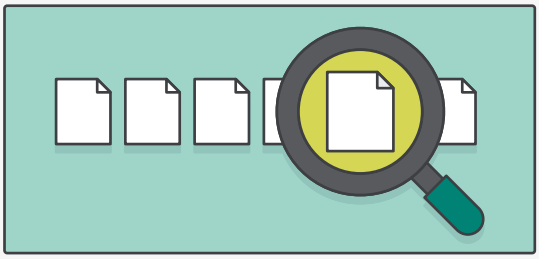
Multi-threat security with Aruba Cloud networking



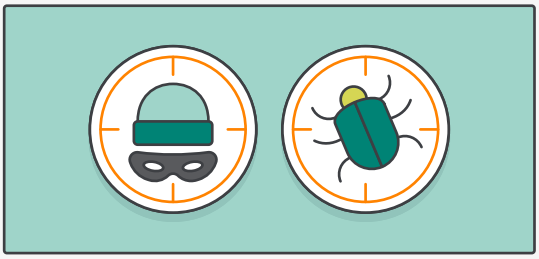
Aruba APs support the latest Wi-Fi authentication (WPA2/WPA3, OWE) standards for protection against common password phishing attacks.



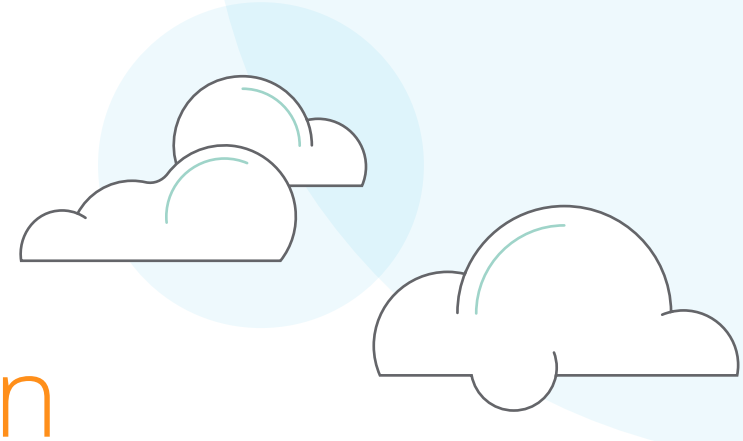
Integrated policy-based enforcement enables application-layer security, prioritization, traffic forwarding, automated segmentation, and network performance policies.



Deep-packet inspection technology and 3000+ application IDs provide accurate firewall and application traffic filtering without additional hardware.



Built-in rogue AP detection helps you lock down unwanted access, along with 24x7 security monitoring to detect and mitigate attacks.



Conclusion

Today's midsize businesses need a network that "just works." Deployment and management simplicity are key with limited staff. It's vital to have built-in intelligence that automatically maintains peak performance, so your IT team can focus on other initiatives. And robust security features for protecting the business against threats and vulnerabilities are a must.

With proactive management tools and an integrated wired and wireless access layer portfolio, Aruba Cloud networking solutions are the simple, smart, and secure way to deliver an amazing networking experience. Aruba solutions are designed to be cost-effective, without sacrificing reliability, performance, or security. Why not keep your users productive and customers happy—and let IT focus on the projects that deliver real business value?

Find out why a cloud-managed network from Aruba is right for your business.

LEARN MORE

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