WiNG 5

WIRELESS LAN SOLUTIONS

LESS REQUIRED. MORE DELIVERED.

MOTOROLA

GET READY FOR THE NEW WIRELESS WORLD

As more and more wireless devices find their way into people's lives and workplaces, they have higher expectations for what a wireless network can do and no patience for glitches. They want apps that don't stall. They want clear, smooth audio and streaming video. And they really need the network to keep working at all times, especially during busy periods.

THE 802.11N WIRELESS STANDARD BRINGS THE SPEED THAT MAKES THESE THINGS POSSIBLE.

But without the right network architecture, your 802.11n network will be like a sports car stuck in traffic—it has the potential for high performance but isn't being given the chance to use it.

Our **WiNG 5 WLAN works differently**. The distributed architecture makes access points capable of delivering full quality of service (QoS), security and mobility services, which gives you better direct routing of data packets and better network resilience. Discover the less complicated, less expensive way to more capacity, more agility and more satisfied users.

DISTRIBUTED INTELLIGENCE:

A SMARTER WAY TO DO WIRELESS

While 802.11n opens up new possibilities for wireless applications, it can't solve problems that are inherent to network architecture. Bottlenecks and system outages will still be pitfalls of most networks.

That's because most WLANs route all traffic, all QoS and all security through a wireless controller. Simply adding access points isn't enough to accommodate higher traffic. If for instance you're streaming video from a security station or accessing high-resolution medical test results, your data is exacting a heavy demand on the network that in a traditional architecture would slow things down for you and everyone else involved. And if a wireless controller or a wired switch should happen to fail, users throughout the network would experience the outage.

OUR MOTOROLA WLAN SOLUTION DOES THINGS DIFFERENTLY.

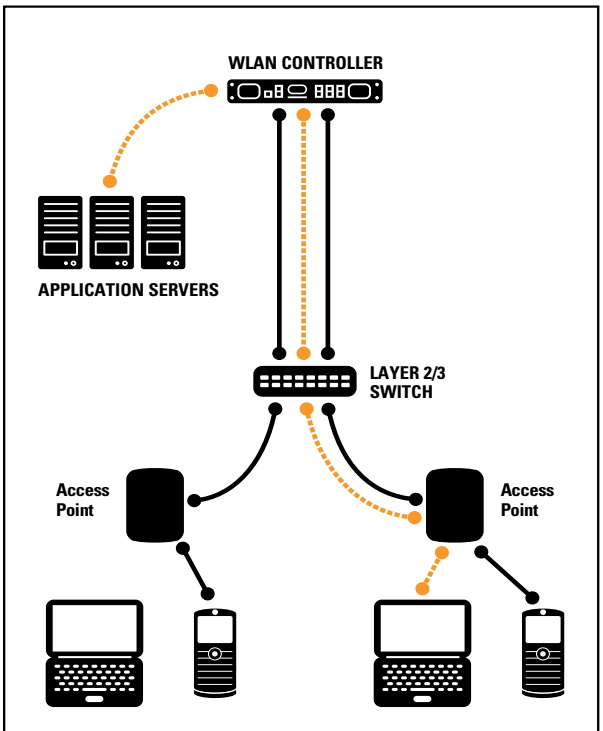
With the same **WiNG 5 network** intelligence built-in to both access points and controllers, the access points are smart enough to communicate directly with each other to create more efficient routes for network traffic. Data moves from one access point straight to the next with full QoS and security, so your users' applications run quickly and seamlessly. Each element of the network is aware of the others and their status, and they work together to find the best routes through

the network. While controllers are still used to manage, direct and scale the network, individual transmissions can take place via the shortest path.

And harnessing the power of the access points means you need fewer wireless controllers, so Motorola's **WiNG 5 WLAN** is able to deliver more of what you and your users need with less infrastructure.

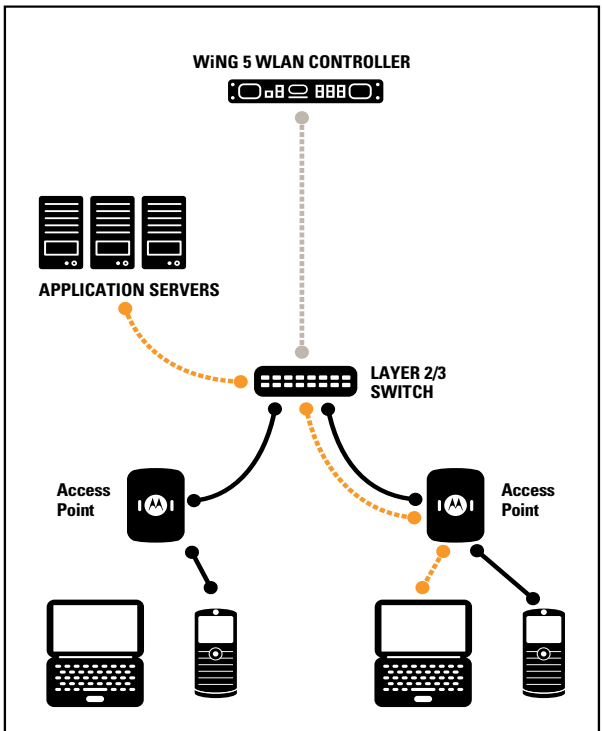
TRUSTED CONNECTIONS. CRISP, CLEAR VOICE AND VIDEO. EASE OF MANAGEMENT. BETTER QUALITY OF EXPERIENCE.

HUB AND SPOKE VS. WING 5 ARCHITECTURE



HUB AND SPOKE ARCHITECTURE

The 'Hub and Spoke' architecture requires traffic backhaul to a controller, which adds congestion and latency.



WING 5 WLAN ARCHITECTURE

The WiNG 5 architecture is free to route traffic directly via the best quality path, minimizing wired traffic and accelerating applications.

MORE NETWORK CAPACITY

Eliminate bottlenecks with intelligent direct routing and experience greater capacity and higher QoS, security and mobility services with powerful WLAN access points that perform well even during the heaviest usage times. That means you can trust the network with more demanding and critical applications, knowing it won't let your users down.

With a **WiNG 5 WLAN**, office workers on laptops won't have to worry about stalled applications when they need them most. Any number of retail associates can use wireless devices to process transactions and access information without having to leave a customer's side – even in busy times, like the holiday shopping season.

USING MOTOROLA DEVICES

As an added benefit, we've designed our WLAN access points to take advantage of special software features on Motorola mobile computing devices that result in faster roaming, more stable connections and longer battery life.

MORE RESILIENCE

Giving brainpower to the access points in addition to the controller does more than enable higher capacity. It also builds in network survivability that proves invaluable if a part of the network is experiencing problems.

WiNG 5 WLAN access points are network-aware, so they can easily reroute around components that are not operational or are overloaded. If a wireless controller or wired switch goes down, your network continues to run with full QoS, security and mobility services. Your users may not even notice the outage.

Motorola WLAN access points and controllers also have a 3G card slot that enables backhaul switch-over to an outside network in case of an outage, so that your users will still be able to use the cloud-based applications that are critical to many operations.

MORE COVERAGE

Just as they're smart enough to talk to each other, the access points and controllers in a **WiNG 5 WLAN** are smart enough to understand the client landscape and RF environment, too. They can detect RF interference, coverage gaps and overloaded channels without any additional hardware. If there's a problem, the application-aware WiNG 5 SMART RF system makes smooth adjustments to power and channel settings to fix it while minimizing the impact to sensitive voice and video applications. Using our AirDefense Network Assurance solution, you can also classify sources of interference and troubleshoot intermittent problems with the help of detailed historical data.

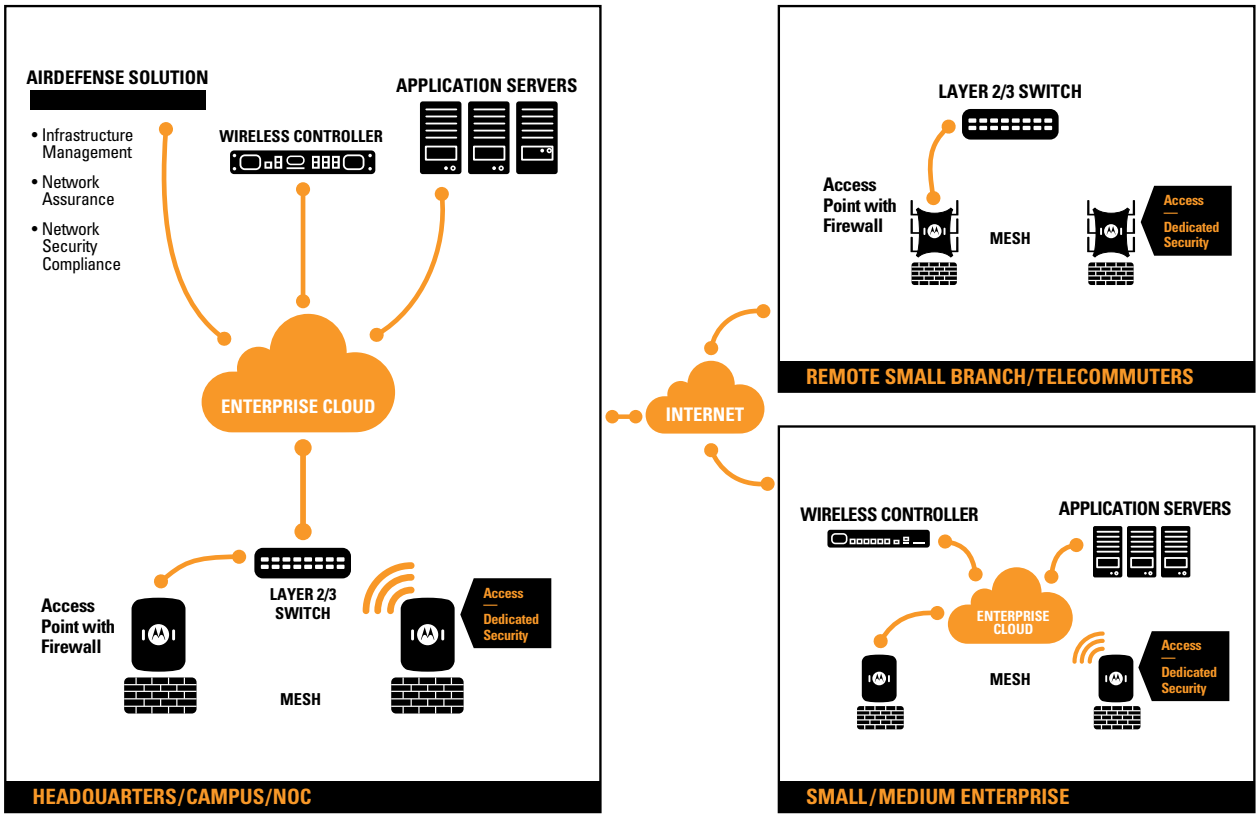
MORE AGILITY

If you've ever felt like you've had to force-fit a wireless solution or make compromises because of limited options, help is on the way. It starts with our broad portfolio of access points and wireless controllers – for small, medium or large sites, indoor and outdoor areas – we even offer specialized wall plate access points for multi-dwelling buildings like hotels, barracks, and dormitories. And the **WiNG 5 WLAN** architecture lets you mix and match site-by-site decisions about whether to use a local or remote primary controller and a local or remote back up controller within the same network. So now you can build a wireless network that better fits your infrastructure and your needs.

To be agile, you need flexibility and speed. We've designed the **WiNG 5 WLAN** so you can quickly deploy it without reconfiguring your wired network VLANs. And access points that are added to the network automatically get over-the-air configuration instructions based on where they are in the network, saving you pre-staging time.

MORE EASE OF MANAGEMENT

The WiNG 5 architecture is built to scale to any size you need. Manage one wireless network across the organization instead of a complicated mix of sites and subnets. Enjoy more peace of mind by being able to set and enforce consistent security and configuration policies across the network.



GET MORE. PAY LESS.

WHAT IF YOU COULD GET ALL THESE CAPABILITIES IN YOUR NEXT 802.11N WLAN-AND IT SAVED YOU MONEY, TOO?

The distributed intelligence of Motorola's **WiNG 5 WLAN** can reduce the initial capital spend, as well as operating expenses. The savings result from several factors:

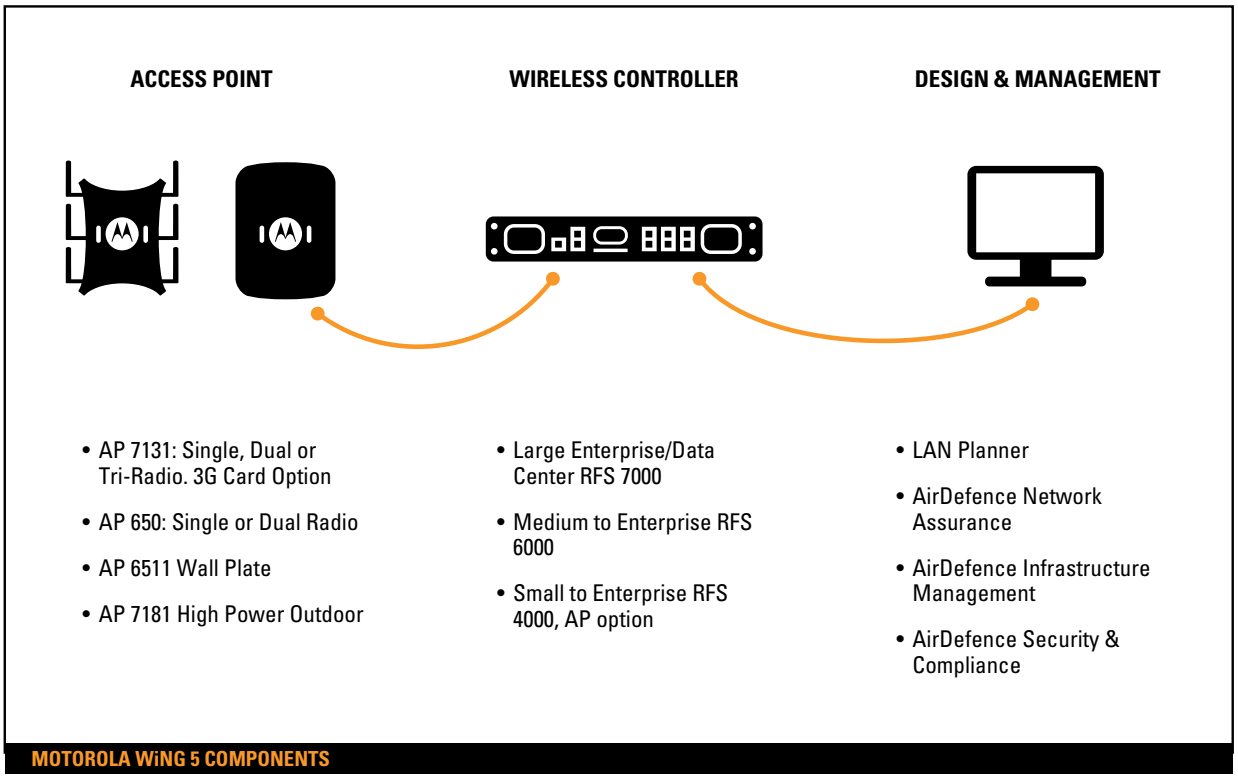
- Our access points have higher power and receiver sensitivity, so fewer are needed to cover a service area. And fewer wireless controllers are needed for a given number of access points, translating into even greater capital savings.
- The access points themselves have integrated security and network troubleshooting sensors, so you don't have to buy a more expensive dedicated network of sensors.
- Our LANPlanner tool models and predicts your optimum 802.11n WLAN layout, allowing you to build a network with just the right number of access points while still maintaining full, even coverage.
- On the operations end of the budget, the AirDefense Network Assurance suite quickly categorizes and resolves problems, which results in fewer trips by technicians to troubleshoot onsite.

MORE OPTIONS. MORE FLEXIBILITY.

ALL OF OUR ACCESS POINTS ARE BUILT TO PROVIDE EFFICIENT ROUTING OF DATA WHILE STILL ENSURING FULL NETWORK SECURITY AND CONTROL.

The access point that's right for you depends on your usage need:

- **AP 650:** A multi-purpose, cost-effective 802.11n access point for headquarter facilities or branch offices.
- **AP 6511:** An access point designed to work with existing CAT5/6 wiring to easily provide wireless service to hotels, dormitories and settings with large numbers of users.
- **AP 7131:** An all-in-one access point that can simultaneously support several functions.
- **AP 7181:** A high-power outdoor mesh access point.



MOTOROLA WiNG 5 COMPONENTS

CONTROLLERS

The RFS 4000, RFS 6000 and RFS 7000 provide central management and security for the network as well as application services, and all are certified to work on 802.11n.

LANPLANNER

OUR LANPLANNER NETWORK DESIGN TOOL LETS YOU BUILD A VIRTUAL WLAN NETWORK IN YOUR WORKSPACE, DESIGNING A SYSTEM THAT'S OPTIMIZED FOR YOU.

LANPlanner takes into account the work environment, the number of users, the applications in use, such as wireless voice over IP (VoIP), and other factors to predict load on the network and proper placement of access points. It even helps you optimize your current infrastructure. Using LANPlanner, you can configure a network several different ways to determine placement options that let you provide full coverage to your users with minimal hardware deployment.

AIRDEFENSE

WHILE KNOWN FOR ITS NETWORK SECURITY & COMPLIANCE SOLUTION, AIRDEFENSE OFFERS TWO OTHER SOLUTIONS ON THE SAME EFFICIENT PLATFORM:

- **AIRDEFENSE INFRASTRUCTURE MANAGEMENT:**
  This program coordinates infrastructure made by different vendors and allows you to manage all the pieces on a single dashboard, enabling your IT department to easily command operations and security on your network even when combining legacy and next-generation components.

- **AIRDEFENSE SECURITY AND COMPLIANCE:**
  This program provides best-in-class network security and compliance with various government and industry regulations, including Sarbanes-Oxley (SOX), the Health Insurance Portability and Accountability Act (HIPAA) and the Payment Card Industry standards (PCI).

- **AIRDEFENSE NETWORK ASSURANCE:**
  This toolkit quickly troubleshoots and diagnoses issues in the wireless network to determine the root cause. While that problem is often in the wired network, Network Assurance is able to analyze issues that lie in the wireless network.

For more detailed product information, visit www.motorola.com/wlan.

LESS WORRY.

MORE WIRELESS.

LET'S FACE IT:

Providing a wireless network can be a thankless job, because users only notice when something goes wrong.
But over time, users do start to notice the quality of their WLAN experience and grow to trust the network to be there for them when they need it most. That's wireless done right. With a Motorola **WiNG 5 WLAN**, you can enjoy that morning cup of coffee with less worry and with the satisfaction of knowing you've made the best choice for your organization.

WIRELESS NETWORK SOLUTIONS

Motorola delivers seamless connectivity that puts real-time information in the hands of users, giving customers the agility they need to grow their business or better protect and serve the public. Working seamlessly together with its world-class devices, Motorola's unrivaled wireless network solutions include indoor WLAN, outdoor Wireless Mesh, Point-to-Multipoint, Point-to-Point networks and voice over WLAN solutions. Combined with powerful software for wireless network design, security, management and troubleshooting, Motorola's solutions deliver trusted networking and anywhere access to organizations across the globe.

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