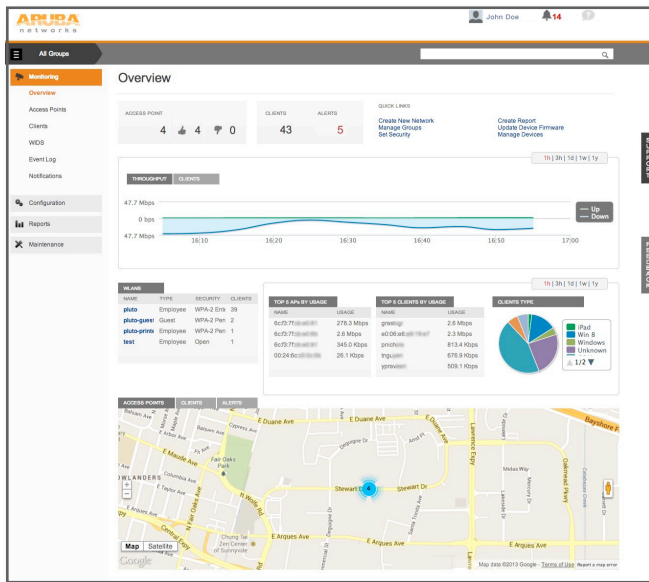


REAL CLOUD WI-FI FOR REAL BUSINESS

Aruba introduces industry's first enterprise-grade cloud Wi-Fi solution



THE NEED FOR BETTER CLOUD WI-FI

As centralized headquarters give way to flexible working models and branch offices closer to the communities they serve, organizations have looked for ways to cost-effectively support networks in diverse locations. Cloud-based WLAN solutions have had the allure of simplicity and low up-front costs, but historically have had some serious limitations.

Previous generations of cloud Wi-Fi solutions have sacrificed the speed, reliability and flexibility associated with enterprise-grade technology, in favor of simplicity of cloud access. The result has been WLAN service disruptions, poor performance, dropped connections, fewer video sessions – and fewer happy users.

Plus, branch offices, home offices and other remote sites were stuck with a different solution than headquarters, making access to services inconsistent for users traveling between locations – and raising operational costs for IT departments.

With Wi-Fi access becoming a user expectation, users are no longer satisfied with just getting a Wi-Fi signal; it must be a high speed, dependable signal, available all the time. And for organizations with many remote workers and branch offices, the WLAN must require minimal intervention and fixing, and be efficient for IT to operate across locations.

SOLUTION BENEFITS

- 10-times faster
 - Up to 10-times faster than competition at high density.
 - True zero-touch WLAN setup.
 - Airtime fairness allows more clients to move faster on the network.
 - Always-on scanning avoids performance-slowng interference.
 - AP optimizes Wi-Fi channel use and power to speed clients.
- Unsurpassed uptime
 - Multiple data center, multiple provider cloud service architecture for the highest availability.
 - 100% functional WLAN without a WAN link.
 - Integrated spectrum management without compromise to identify and self-heal around Wi-Fi and non-Wi-Fi interference.
 - Redundant ISP uplink and 3G/4G uplink option.
- Unmatched affordability
 - Integrated roaming support without need for external appliance.
 - No external subscriptions required.
 - 100% investment protection to convert to controller-based APs.
 - One set of access points for headquarters, branch and home.

REAL CLOUD WI-FI FOR REAL BUSINESS

Aruba Networks introduces the first cloud-managed Wi-Fi solution that delivers enterprise-class performance and reliability stemming from over a decade of wireless innovations while eliminating the up-front setup and management costs with Aruba Central, a cloud-based multisite, multiservices management solution. The new cloud Wi-Fi solution leverages Aruba Instant controllerless access points (APs) for Wi-Fi coverage that delivers:

- 10-times faster than other cloud Wi-Fi solutions in environments with high densities of devices.
- Unsurpassed uptime with wired and cellular uplink failover in the event of a WAN link failure.
- Unmatched affordability with one architecture across all locations, including both cloud subscription and on-premises management options for branches.

With Aruba cloud Wi-Fi, organizations no longer need separate Wi-Fi architecture for corporate, branch and home installations. Unlike competing options, any Aruba AP hardware can be cloud-managed for branch locations or controller-managed in larger sites. Common management and policy infrastructure can be used for all installations. This brings down the operational costs of maintaining multiple systems. Plus, Aruba Cloud Wi-Fi includes roaming between subnets, without the need for an external appliance – eliminating hidden costs.

WHAT'S NEW

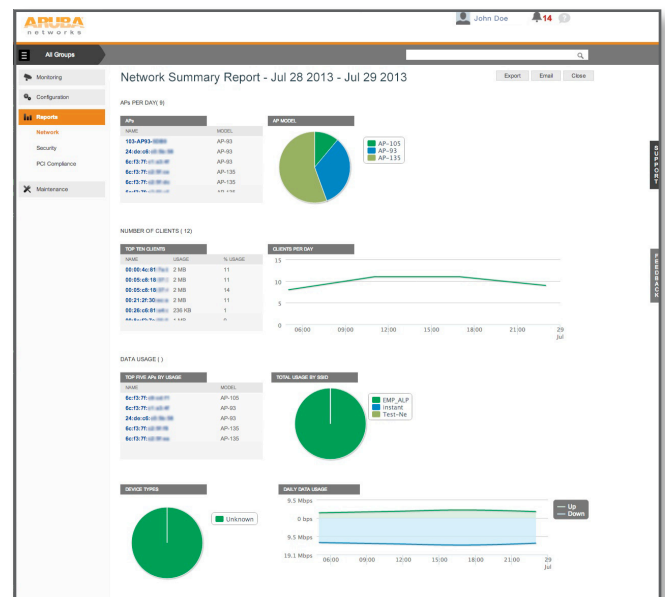
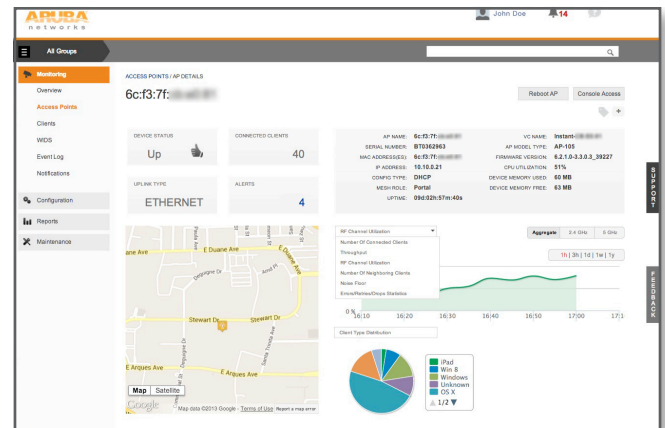
New cloud Wi-Fi solutions from Aruba include new APs, switches, software and services that raise the bar for simplicity and performance.

The new **Aruba Central** services platform, hosted in the cloud, gives organizations simple management for zero-touch setup, centralized management of multiple Instant networks, historical data reporting, tracking PCI compliance, and troubleshooting for networks located around town or around the world.

Organizations also have a choice of acquiring Aruba AirWave private cloud management software as well as free Instant AP management interface where each AP cluster can be managed individually.

Aruba Central public cloud management services offer:

- Modern cloud architecture for always-on service
 - Web-scale database design for responsive performance
 - Clustered and distributed with multiple data center providers for redundancy
 - Global reach with data center locations around the world
- Single point of management for multiple sites and multiple clusters in a single site
- Remote monitoring and troubleshooting
 - Proactively find issues
 - Assisted problem isolation
 - Clear, actionable data with guidance
 - Detailed device information
 - Execute troubleshooting commands on AP from the cloud
- Central configuration and firmware management
 - Configure your entire network from a single point
 - Organize your network using groups
 - Share common configurations across multiple Instant AP clusters
 - Flexibility to override at any individual cluster level
 - Cloud-hosted firmware server
 - Flexible model to support organizational policy for upgrades
 - Scheduled upgrades allow off-peak upgrade windows across different time zones without staying up
- Compliance records and historical data
 - Network and security snapshots over customizable period
 - Scheduled reports allows for low effort monitoring
 - PCI compliance reporting
- True zero-touch provisioning
 - Saves time in deploying remote, multi-site networks
 - Connect point-of-sale data + AP MAC address + management service
 - Loads a preset configuration on new APs without intervention
 - Any person on site can plug in AP and power on
 - No MAC address entry, no manual intervention



Highest performance WLAN Infrastructure

Whether managed from the cloud or managed locally, controllerless Aruba Instant APs deliver enterprise-grade security, resiliency and scale to enable the highest performance WLANs in the industry.

With Aruba Instant, one dynamically-elected AP automatically distributes the network configuration to other Instant APs in the WLAN. Simply power-up one Instant AP, configure it over the air or in the cloud, and plug in the other APs – the entire process takes about five minutes.

Instant APs come with Adaptive Radio Management™ (ARM) technology, which optimizes Wi-Fi network behavior and automatically ensures that Instant APs stay clear of RF interference, resulting in a more reliable, higher-performing WLAN.

Integrated application fingerprinting ensures priority handling of multimedia and other delay-sensitive traffic. Additionally, integrated device fingerprinting is essential to supporting diversity and density of smartphones, tablets and laptops.

The Aruba Instant product family consists of a wide range of APs with a variety of wireless, wired and WAN connectivity options.

INDOOR WIRELESS

Instant 134/135

Highest performance

- For large numbers of mobile devices
- 3x3 MIMO, three spatial streams, up to 450 Mbps
- 2.4- and 5-GHz radios
- Internal and external antenna options
- Mounts on ceiling or wall



Instant 104/105

Most popular

- For warehouses and high ceilings
- 2x2 MIMO, up to 300 Mbps
- 2.4- and 5-GHz radios
- Internal and external antenna options
- Mounts on ceiling or wall



INDOOR WIRED AND WIRELESS

Instant 155

Highest performance

- 2.4- and 5-GHz radios
- 3x3 MIMO, three spatial streams, up to 450 Mbps, 100 Mbps encrypted throughput
- Four ports to connect wired devices (optional power-over-Ethernet on two ports)
- Optional 3G/4G WAN connection
- Sits on your desk



Instant 108/109

High performance

- 2.4- and 5-GHz radios
- 2x2 MIMO, up to 300 Mbps
- One port to connect wired devices
- Optional 3G/4G WAN connection
- Sits on your desk



Instant 3

Most affordable

- One 2.4-GHz radio
- 2x2 MIMO, up to 300 Mbps
- Two ports to connect wired devices
- Optional 3G/4G WAN connection
- Sits on your desk



OUTDOOR WIRELESS

Instant 175

Ruggedized for the great outdoors

- 2.4- and 5-GHz radios
- 2x2 MIMO, up to 300 Mbps
- Four external antenna connectors
- Mounts on a pole or building



New S1500 Mobility Access

Switch, which integrates with Instant cloud Wi-Fi APs for seamless VLAN provisioning, and includes high availability features:



- 24 or 48 10/100/1000BASE-T ports with power-over-Ethernet (PoE).
- Four 1000BASE-X SFP fixed Gigabit Ethernet uplink ports.
- Link aggregation groups (LAGs): Physical ports may be bonded together to increase uplink bandwidth and eliminate backup links.
- Hot-standby link (HSL): simplified link failover mechanism without spanning-tree protocol.
- 802.1af PoE with up to 15.4 watts per port and 802.3at PoE+ with up to 30 watts per port.
- PoE priority: ArubaOS PoE priority classifies attached PoE devices with a priority level, ensuring no loss of power for business-critical.

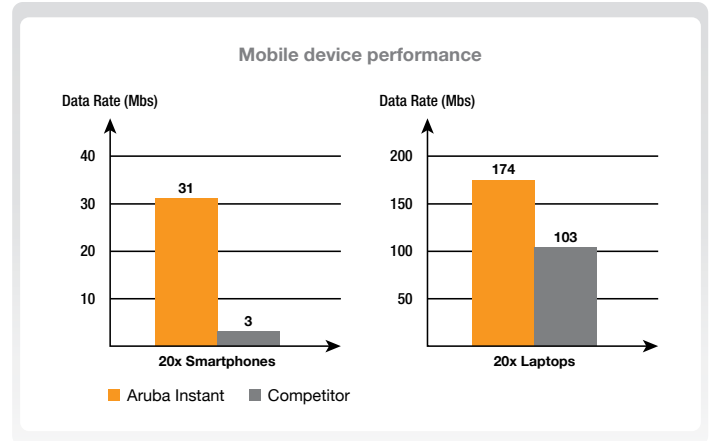
Five new resiliency features

New software features in the Aruba InstantOS include enterprise-class resiliency capabilities that keep networks up and running even when one Internet connection fails. Highlights include:

- Dual Ethernet uplink support builds on already-strong uplink resiliency options. You can now plug Internet connections from two different ISPs into one Aruba Instant AP.
- For organizations with mission-critical WLANs, no downtime is good downtime. So with this feature, you have best-possible Internet availability.
- 4G uplink with the new Sierra Wireless U313 USB modem that slots into Aruba APs. Now you have the fastest available cellular uplink, either as a primary connection in hard-to-wire areas or as a backup for mission-critical applications.
- Flexible image upgrade features, so you can download firmware now and reboot later during off hours. This lets you leave the office on time, and upgrade when no one is using the network.
- Spectrum load balancing to even out the client load across channels in a dense deployment. This speeds up access for everyone by more efficiently using all available wireless spectrum.

Aruba has prepared careful performance comparisons between the Instant 135 and other cloud-managed solutions, with the following results:

- 10-times faster smartphone connections when measuring TCP downstream aggregate throughput (Mbps) for 20 smartphones (iPhones 1x1:1) in 2.4-GHz band.
- 69% faster laptop connections when measuring TCP bidirectional aggregate throughput (Mbps) for 20 laptops (3x3:3) in 5-GHz band.
- 2-times more HD video clients when measuring multicast HD video at scale (5 Mbps video stream to see max laptops on the network before the video becomes unwatchable).



Online support community

New **eSupport** site gives free access to how-to videos, troubleshooting, knowledge bases and community support for fast and easy learning.

- Online case management
- Live chat based support
- Knowledge base articles
- Product documentation
- 24x7 phone support

LOTS OF WAYS TO SAVE

There's another side of the story: money. The architecture and the simplicity of Aruba Instant and Aruba Central make them cost-effective to acquire and maintain.

Low CapEx

With Aruba cloud Wi-Fi, you get enterprise-grade features and controller functions embedded in the AP. We eliminate the hardware expense of a separate controller, but keep all the performance and reliability advantages.

- No roaming or controller hardware to buy, enabling you to save thousands of dollars per site.
- Low up-front cost with affordable cloud management subscription.
- No appliance to install and maintain. With less hardware, less rack space and power are consumed and no time is spent on maintaining a separate appliance.

Low OpEx

Aruba cloud Wi-Fi integrates everything into the AP – controller functions, security and ARM™ RF optimization. And cloud-based Aruba Central makes setup and management easy-to-use for non-experts.

- Streamlined maintenance: The radically simplified cloud interface means you spend less time hassling with updates and configuration – and don't need a wireless expert on staff to do it.
- Free firmware updates and online support community. It's easy to solve problems quickly and stay current because we provide always-available online tools.

Investment protection

Aruba cloud Wi-Fi has lots of advantages, but one really stands out – only Aruba offers both controllerless and controller-managed Wi-Fi with public cloud, private cloud or on-premises management. You can even mix and match between them. You're not locked into one architecture, so when your needs change – and they will – you keep 100% of your investment.

- No hardware changes. All Instant APs can utilize VPNs to access centralized resources like guest access or authentication services from corporate headquarters.

At any time, Instant APs can easily convert to controller-managed mode, enabling you to mix and match the right solution for the right location – headquarters, branch or home. No matter what you decide, your existing AP investments are fully protected.



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