



**Mobilize to Rightsize  
Your Network**



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# Mobilize to Rightsize Your Network

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## **How enterprise mobility can reduce the total cost of network ownership by 70 percent**

The cubicle is no longer the center of the business universe. Mobile devices are making their way onto corporate enterprise networks by the millions as they transform how work gets done.

Laptops, smartphones – and now tablets like the Apple iPad – have allowed people to rise up and be productive anywhere, anytime. It's common to juggle a company smartphone, a personal phone, a laptop and a tablet, depending on the task and where you are at any given moment.

Much attention has been paid to the convenience and productivity of mobility. But there is another tangible benefit: Cost reduction. A converged access network can cost as little as a third to deploy and a fourth to operate than legacy architectures.

As enterprises modernize their networks to support mobility and other business initiatives, an unprecedented opportunity arises that enables IT organizations to rethink decades-old assumptions about how it builds and delivers networks.

### **Mobility means cost savings**

Today, users expect their laptops, smartphones and tablets to connect wirelessly to the network, without the hassle of plugging in a wired Ethernet cable. Tablets and smartphones don't even have a wired Ethernet port.

Now contrast users' expectations with how campus and branch office networks are designed. They're wired networks, with multiple wired Ethernet ports – often as many as four per user – to accommodate desktop PCs, laptops, phones, while leaving room to grow.

As many organizations have discovered, the 300 Mbps wireless data rate of the 802.11n standard has broken the wired speed barrier. Enterprise-grade Wi-Fi is designed for application performance and uninterrupted voice and high-definition video.

Once enterprise-grade Wi-Fi is available, users clearly prefer to access the network wirelessly. Wi-Fi connections are just as fast and reliable – and a lot more convenient. This is the reason why fewer client devices access the network using wires.

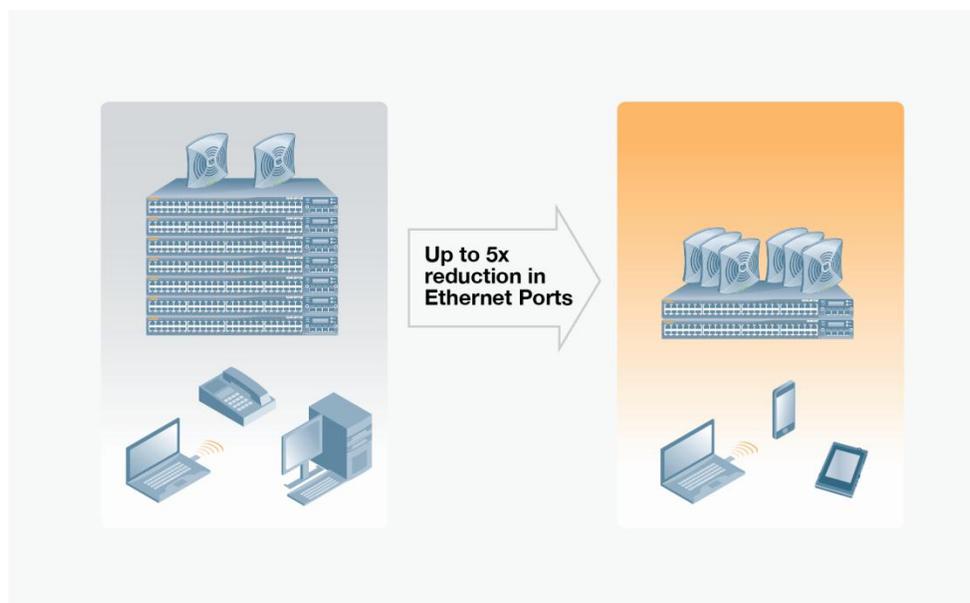
As more wireless access points (APs) are deployed, the access network needs fewer wired Ethernet switch ports. IT no longer needs to plan for up to four wired ports per user. Only one Ethernet jack is required per AP, and each AP may cover 10-25 workstations. The cost efficiencies of Wi-Fi connections over wired connections add up to bottom-line savings.

Rightsizing the network has clear benefits. Access switches in wiring closets can be consolidated, and the number of wiring closets can be reduced. Less power and cooling are needed, which helps companies shrink their carbon footprint.

With fewer switches to manage and maintain, the network is simpler to manage. Annual switch maintenance contracts can also be eliminated for additional operational savings.

## Getting started on savings

Rightsizing your network begins with assessing where the wired network stands today. Start by assessing the number of wired ports that are truly needed in a mobile age, and determine where wired network capacity can be offset with more cost-effective enterprise Wi-Fi coverage.



Following are the top considerations for rightsizing the network. Collectively, the changes brought on by mobility can create a five-fold reduction in the number of switches and ports that were once required in every wiring closet.

- **Start with laptops** – All laptops use Wi-Fi, and if you have enterprise-grade Wi-Fi coverage, you can give employees and guests the convenience of mobility, rather than tethering users with cables.

*Every data port put in place or reserved for laptop connections can be eliminated.*

- **Assess common areas** – Consider how many network jacks are available in shared spaces, such as conference rooms, building lobbies, printer stations or other common areas. No one

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hauls a desktop PC into a conference room or student lounge, so why provide so many wired connections?

*Nearly all wired ports in common areas can be eliminated because users expect – and prefer – Wi-Fi.*

- **Consider future network demands** – Many IT departments buy 20 to 25 percent more Ethernet ports for future capacity. That was sound thinking in an era of hulking computing devices, but the reasons for building capacity into the wired network are less compelling than a year ago.

*Most user devices are mobile – and they use Wi-Fi first and wired second. Instead, build the capacity into the wireless LAN (WLAN), as that’s where the growth is coming from.*

- **Eliminate desk phones** – Unified communications lets workers stay productive whether they’re on campus or off. They have access to the same audio and videoconferencing, telepresence and voice-over-IP (VoIP) services – from their smartphones or IP phones. Collaboration becomes even more efficient with applications such as Microsoft Lync Server.

*“Enterprises are moving from hardware-based voice systems that are reaching end-of-life status to software-based VoIP systems that transport voice over the corporate IP networks and the Internet.”*

Source: Gartner, Oct 2010 - VoIP, Unified Communications and Collaboration Key Initiative Overview for CIOs

While a rip-and-replace of any technology is a rarity, there are many opportunities to rightsize the access network. In the last two years, organizations have timed their switch upgrade and new-build projects with network rightsizing projects.

Others have used Wi-Fi network expansion to realize savings by eliminating additions, moves and changes. The increasingly mobile workforce creates opportunities to reshape how networks are built. As a result, network purchases that involve WAN upgrades, branch expansions, work-at-home initiatives and cloud computing can bring rightsizing benefits.

## **Make the right MOVE with Aruba**

With the Mobile Virtual Enterprise (MOVE) architecture from Aruba Networks, IT organizations can accelerate network rightsizing savings. Aruba MOVE consists of thin network on-ramps for wired, Wi-Fi, VPN and branch access.

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More importantly, MOVE eliminates redundant services across different on-ramps, which dramatically reduces capital and operational costs. In fact, rightsizing with Aruba MOVE can cut your total cost of network ownership by up to 70 percent, compared to traditional architectures from legacy vendors.

Most IT departments support multiple networks – the traditional wired network, a rapidly growing WLAN, VPNs and remote connectivity to branch and home offices. Each network has its own infrastructure, management platform and security.

IT must make sure that security, management and performance are consistent across these disparate networks. The cost of owning multiple networks adds up.

Aruba MOVE unifies disparate wired and wireless into one unified access solution that fits a variety of users, including traveling business professionals, remote office workers, corporate headquarters employees and guests. Access privileges are based on the user's identity, which ultimately dictates the type of network resources each person is entitled to.

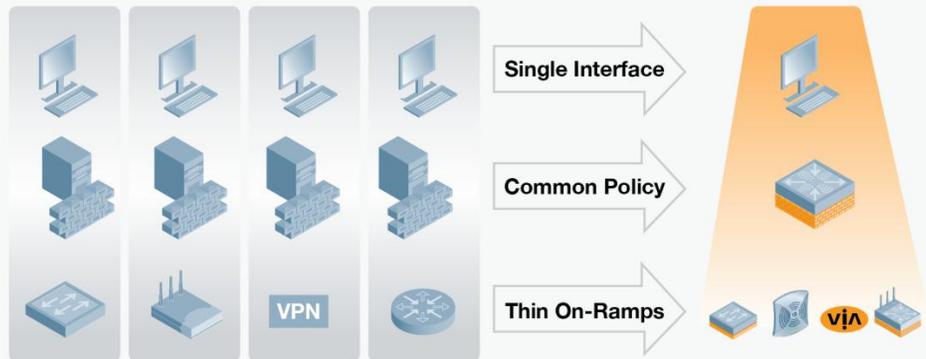
Consequently, the entire mobile enterprise workforce has consistent and secure access to the appropriate network resources based on their identity – no matter where they are, what device they're using or how they're connected.

MOVE also consolidates network, security and management services into one unified system located in the data center. These mobility services are required for every access network on-ramp, including Ethernet switches, 802.11n Wi-Fi, VPN and branch routers.

With Aruba, six different management interfaces are merged into one common policy framework for the entire access network. This is why the Aruba MOVE architecture requires up to five-times fewer resources to install and maintain compared to legacy vendor offerings.

MOVE uses thin network on-ramps that are centrally controlled and managed. As a result, Aruba on-ramps cost 40 percent less than the equivalent on-ramps from legacy vendors.

## 70% Reduction in Access Network TCO



*Aruba MOVE unifies wired and wireless networks with a consistent set of services that are managed in the data center, such as identity management and role-based policy enforcement. It includes affordable access on-ramps for wireless, wired and VPN connectivity that use these services across all locations and access methods.*

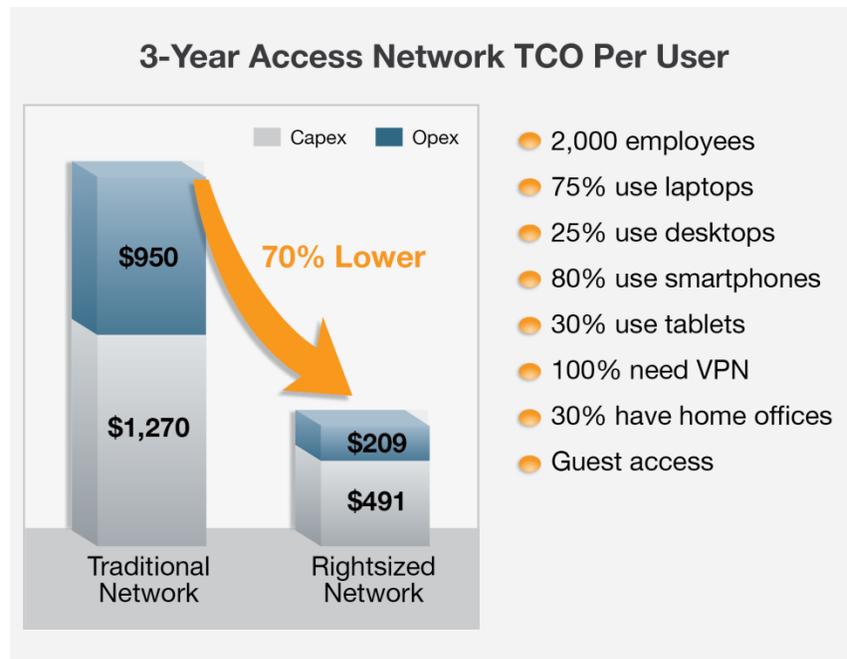
### Rightsize, don't supersize

Let's look at the benefits of network rightsizing at a midsized organization with 2,000 employees. In this organization, everyone has an IP desk phone, 80 percent of workers have smartphones, and 75 percent have laptops. Half of the employees have tablets. Everyone has secure access to the network through a VPN connection, and 30 percent have a home office.

Consider a network upgrade that involves wired switching, Wi-Fi and remote access over a three-year period. The chart below shows the network expenses of a rightsized network built with Aruba MOVE and a traditional network with traditional legacy equipment.

The calculations assume street pricing with a 60% higher discount on legacy equipment than on Aruba MOVE products. Despite the deeper discounts on legacy gear, a rightsized network delivers significant savings due to the combination of a smaller wired network, consolidated network services and thin on-ramps.

The total savings cascades through capital, operating and environmental expenses. A rightsized network costs \$700 per user, while a traditional network costs \$2,220 per user. That's a 70 percent difference.



*In a network that is rightsized through mobility, the cost of a 2,000-user access network over three years is \$700 per user, compared to \$2,220 per user with a network that relies on legacy equipment.*

## Are you ready to rightsize?

Learn more how to rightsize your network at [www.arubanetworks.com/rightsizing](http://www.arubanetworks.com/rightsizing).

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## About Aruba Networks

Aruba is the global leader in distributed enterprise networks. Its award-winning portfolio of campus, branch/teleworker, and mobile solutions simplify operations and secure access to all corporate applications and services - regardless of the user's device, location, or network. This dramatically improves productivity and lowers capital and operational costs.

Listed on the NASDAQ and Russell 2000® Index, Aruba is based in Sunnyvale, California, and has operations throughout the Americas, Europe, Middle East, and Asia Pacific regions. To learn more, visit Aruba at <http://www.arubanetworks.com>. For real-time news updates follow Aruba on [Twitter](#), [Facebook](#), or the [Green Island News Blog](#).

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