

# Why your next WiFi deployment should be cloud managed

WiFi networks began as standalone access points, evolving through controller-managed, to become contemporary cloud-managed networks. Each phase has addressed problems with the existing way of doing things.



As networks grew, the need for centralized management and data traffic led to hardware controllers to be co-installed with the access points. This provided administrators with oversight of their WiFi networks' performance from a single console. However, the limitations of hardware-based controllers encouraged vendors to move towards cloud-based controller options.

Today's cloud-based controllers are the ideal solution for most WiFi deployments. They provide scalable, reliable management, while reducing time spent by administrators on hardware installation and maintenance.

## CLOUD PROVIDES ELASTIC SCALING

One difficulty with hardware controllers is their range of different sizes, which requires replacement of hardware as networks grow, expensive in terms of both cost and administrator time. Management of cloud-based solutions, on the other hand, can scale from a single AP to 2000, without adaptation of any hardware. The controller grows effortlessly with the expansion of the network.

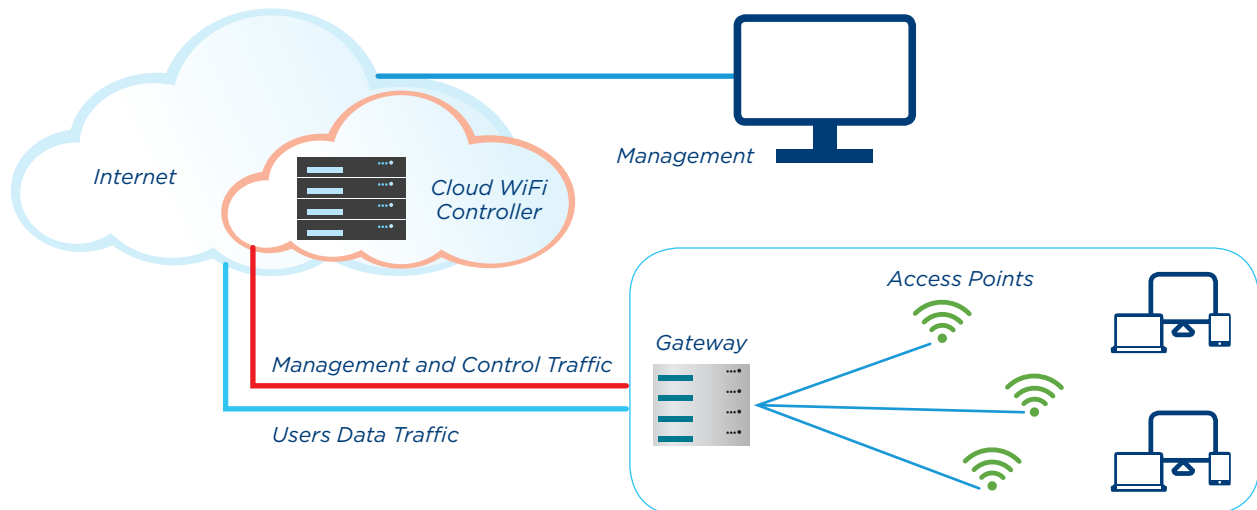
## RELIABILITY IS A FORTE OF CLOUD

In any controller-based solution, reliability is critical due to centralization of the entire WiFi network's management. In a traditional hardware controller model, the administrator would inter-connect controllers in some sort of 1:1 or N+1 redundancy model, and handle any hardware failures. Statistics and configuration backup was also an administrative task.

With cloud-based solutions, the network administrator is freed of these demands, which are all handled by the dev-ops team of the cloud controller provider.

## CLOUD CONTROLLERS ARE SECURE

Cloud-based controllers are usually built to optimize security, and are more easily updated than hardware-based controller approaches because updates simply push out on the cloud. There have been several past cases in which a common software vulnerability was discovered, then immediately patched on the cloud service- often without the users even requiring notification. This is yet another capability of cloud-based service, which otherwise would burden local network administrators.



## CLOUD CONTROLLERS ARE COST EFFECTIVE

Cloud controllers tend to appear as subscription-based service, with low per-AP management costs. This can reduce the upfront investment associated with hardware controller. Some vendors even offer cloud service free for either all users, or for small to medium networks.

## ACCESS ANYWHERE

Cloud based controllers are accessible from any location and via any device from which the administrator can access the the internet - a phone, tablet, or laptop. Traditional controllers are typically co-installed with APs and often operate on private networks, making access a challenge that usually involves a VPN connection into the network, etc.

An important point to note when evaluating cloud based controllers is what happens if you wish to switch management of your APs from cloud-based systems to a local controller option. Different vendors have different approaches here, with different levels of flexibility to the administrator. Some allow any form of transition from controller to local, others restrict the APs to cloud management. It's wise to maintain options with flexible architecture.

In summary, cloud-based WiFi controller solutions offer advantages administrators should evaluate seriously as they plan management of their WiFi networks. These decisions can be easy, considering the power and flexibility of cloud-based architecture.



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