

# cnPilot™ - Adaptive Wi-Fi Architecture

A variety of access architectures have evolved over two decades of increasing Wi-Fi use within organizations. Some have been driven by product limitations; others have been created to meet security or regulatory requirements.



Among the many questions that arise during network design, administrators need to address the following:

- Management - Will the operation benefit more from a cloud-based or on-premises management system?
- Traffic separation - Are the organization's requirements best served by local breakout of Wi-Fi traffic, or the extra separation of traffic made possible by tunneling user data to a controller?

Many vendors' solutions lock administrators in to a particular deployment model or network traffic distribution system, but Cambium Networks believes that Wi-Fi network design should conform to the organization's needs, not the other way around.

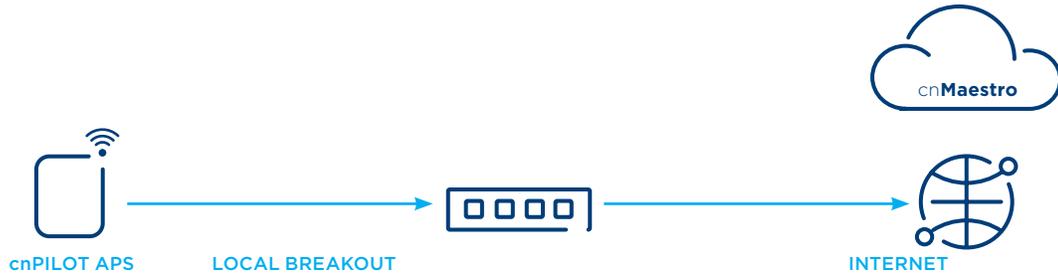
Cambium Networks cnPilot's Adaptive Wi-Fi architecture enables Wi-Fi integration with existing wired network infrastructure and the cnMaestro™ management system provides scalable, flexible management in addition to Wi-Fi controller features.

## THE KEY ARCHITECTURAL CHOICES ARE:

- Where does your user data traffic go? The Wi-Fi AP can bridge it onto Ethernet (also known as local break out). Another option is to tunnel it over an IP-based protocol to a tunnel terminator, which can be a wireless controller or a different third party concentrator.
- Where does your Wi-Fi controller and management system run? Some organizations prefer the convenience of a vendor operated cloud-based management system. Others prefer in-house operation - usually with controllers that can manage tens of thousands of access points. For very small deployments, it can make most sense to configure an AP to perform the duties of a controller.

Regardless of your requirements, cnPilot™ and cnMaestro™ offer customizable options for a complete Wi-Fi solution that meets your needs.

## cnMAESTRO CLOUD



Zero-touch deployment and Cloud-based management lets you easily deploy and control even large networks without requiring an IT team. Cambium operates cnMaestro™ in the cloud, scaling easily to thousands of devices – at no cost to you. The Cambium cloud is a highly redundant system with servers across the globe to ensure high uptime, with a secure HTTPS channel dedicated to communication between Wi-Fi APs and the cloud. cnMaestro™ advanced controller features include scalable guest access and remote login, allowing you to access your management console from anywhere in the world without having to VPN into your organization’s internal network.

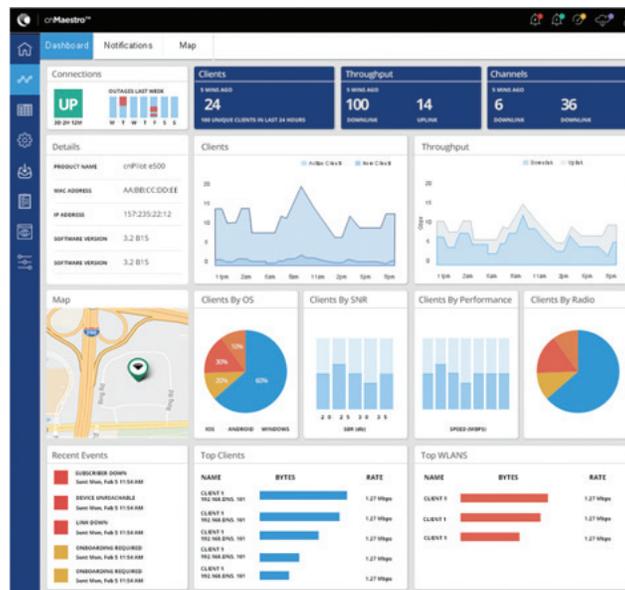
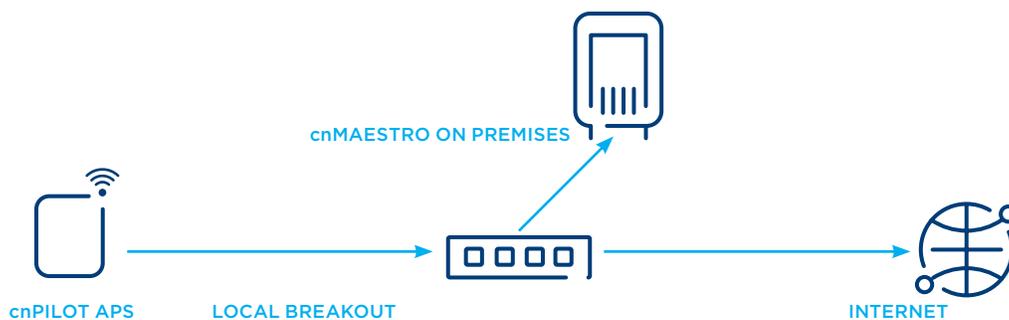
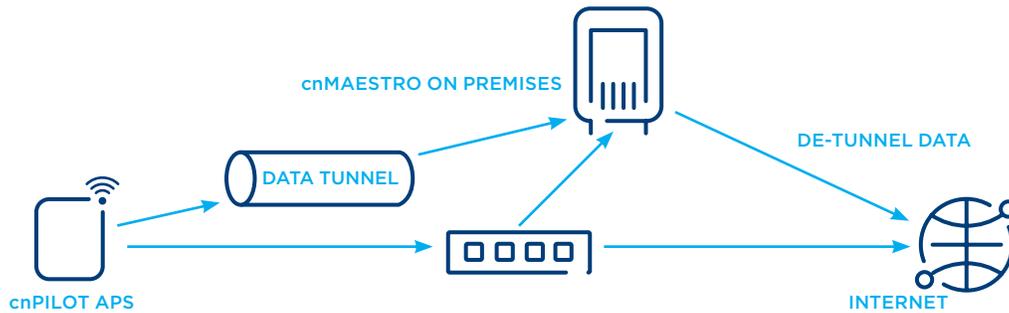


FIGURE 1 cnMAESTRO DASHBOARD

## cnMAESTRO ON-PREMISES

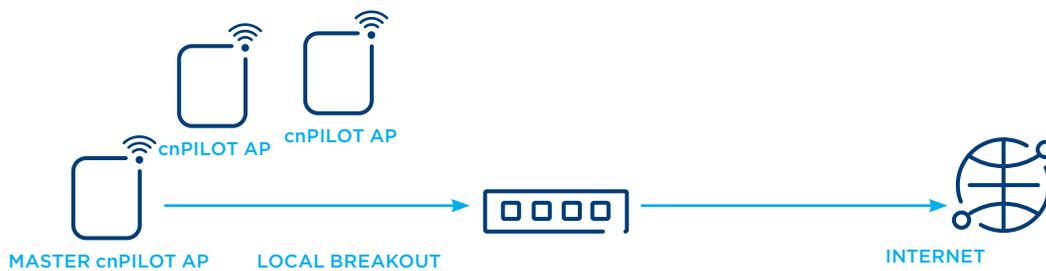


Organizations may choose on-premises management for a variety of reasons. Regulatory or security requirements, or simply preference for in-house management solutions may limit cloud-based control capability. cnMaestro™ on-premises management is perfect for such organizations, providing the same set of features as cnMaestro™ cloud management in a virtual appliance package.



cnMaestro™ on-premises can also terminate data traffic tunneled from cnPilot™ APs over a tunnel and bridge it out over an isolated VLAN. This is useful if, for instance, you never want to bridge guest traffic at the edge of your internal network.

### cnPILOT™ AUTOPILOT



For very small deployments that will not use cloud-based management, cnMaestro on-premises may be impractical for just a few APs. In that case, cnPilot Autopilot lets you designate and configure a master AP to perform double duty as a wireless controller for up to 32 other APs in addition to providing normal Wi-Fi service. All monitoring and configuration can be done from the master AP's UI.

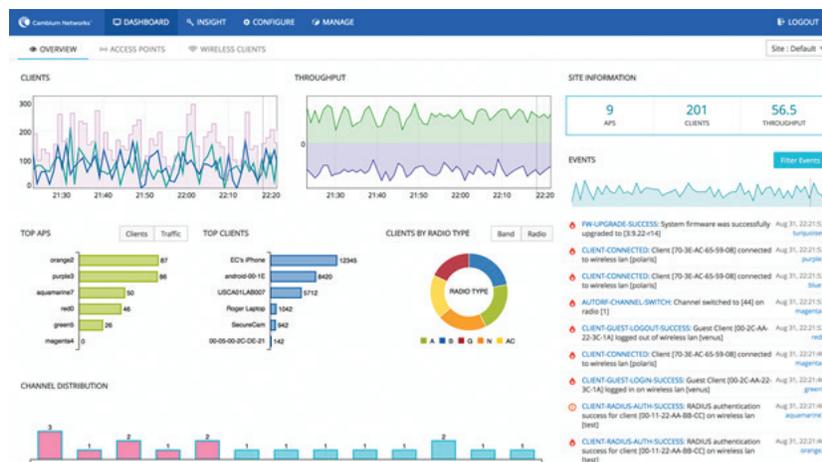


FIGURE 2 AUTOPILOT

cnPilot™ and cnMaestro™ solutions from Cambium Networks make it easy for network administrators to design reliable, efficient connectivity solutions that scale and migrate easily to other architectures according to demand.

## **ABOUT CAMBIUM NETWORKS**

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Cambium Networks is a leading global provider of trusted wireless solutions that connect the unconnected – People, Places and Things. Through its extensive portfolio of reliable, scalable and secure wireless narrowband and broadband platforms, Cambium Networks enables all service providers and industrial, enterprise and government network operators to offer affordable, reliable, high-performance connectivity. Cambium equipment currently powers thousands of demanding networks in more than 150 countries. Headquartered outside Chicago and with R&D centers in the U.S., U.K. and India, Cambium Networks sells through a range of trusted global distributors.



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