aruba
a Hewlett Packard
Enterprise company

CLOUDFLARE

Cloudflare Magic WAN + Aruba EdgeConnect

Deliver a seamless global secure network from the branch to the cloud with Aruba EdgeConnect SD-WAN and Cloudflare Magic WAN

Challenge

Traditional WAN architectures using rigid and expensive MPLS circuits and leased lines inhibit business agility and growth. Security requirements often force traffic through dedicated Internet exit points that can introduce unnecessary network latency and affect application performance.

Solution

The integrated solution of Aruba EdgeConnect and Cloudflare Magic WAN helps mutual customers leverage their existing SD-WAN infrastructure by connecting their devices to Cloudflare for additional security and control across all business entities. Aruba's EdgeConnect SD-WAN offers physical and virtual appliances to create logical network overlays across the wide area network. This solution enables network administrators to create multiple distinct traffic profiles governing how enterprise application traffic is forwarded between office branches and the Internet.

Benefits

The joint solution of Aruba EdgeConnect and Cloudflare Magic WAN allows customers to securely connect data centers, offices, and cloud VPCs to Cloudflare's global network, all within one unified network-as-a-service (NaaS) solution.
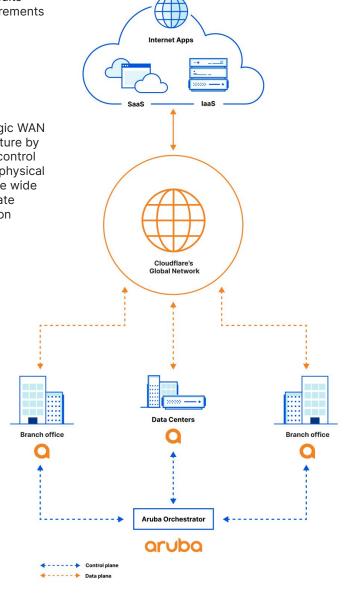
Enhanced security by deploying global network security policies in the cloud with Cloudflare Magic Firewall.

Global scale with proximity to Cloudflare's network from wherever your offices, data centers, and users are located.

Easily connect SD-WAN appliances to Cloudflare Magic WAN with a few simple commands.

Internet Apps

SaaS   IaaS

Cloudflare's
Global Network

Branch office   Data Centers   Branch office

Aruba Orchestrator

aruba

- - - → Control plane
- - - → Data plane

Cloudflare One: A fully cloud-native, Zero Trust SASE platform

Cloudflare One can help organizations ensure they meet today's evolving architecture needs, unifying cloud-native security and access solutions with our Zero Trust and Magic network services. In particular, Cloudflare's Magic WAN offering securely connects remote users, branch offices, and data centers to the application and Internet resources they need — all in a single SaaS solution that reduces operational costs for users.

As a result, customers benefit from more security and control than they would have under traditional WAN architecture models, with a simpler connectivity configuration (through Cloudflare's global edge using familiar SD-WAN appliances) and a unified and easy-to-use solution with policy management, logging, and analytics all available on a single dashboard.

This joint solution expands upon the existing capabilities of Aruba EdgeConnect SD-WAN by combining with Cloudflare's global network for a fully cloud-native, Zero Trust WAN architecture. To securely route traffic, Anycast tunnels are set up between the EdgeConnect appliances (which manage subnets associated with branch offices or retail locations) and Cloudflare. Customers can choose to match and send certain Internet-bound traffic over established tunnels to Cloudflare, and send other traffic types through other EdgeConnect interfaces.

Setup process

The depicted flow illustrates the following:

1. **Anycast GRE** or **IPSec tunnels** are first established between the EdgeConnect appliances in each branch office or public cloud and Cloudflare's global network. In other words, appliances are connected to the nearest global Cloudflare data center.

2. The network administrator then leverages Aruba Orchestrator's Business Intent Overlays (BIOs) to create policies that automatically **identify and steer application traffic** to Cloudflare.

3. After configuring overlay policies, network admins create tunnels on both Cloudflare and EdgeConnect, define static routes on the Cloudflare dashboard and Aruba Orchestrator — so Cloudflare can route traffic between sites — and finally will validate traffic flow through Cloudflare's Secure Web Gateway.

About Cloudflare

Cloudflare, Inc. is on a mission to help build a better Internet. Cloudflare's platform protects and accelerates any Internet application online without adding hardware, installing software, or changing a line of code. Internet properties powered by Cloudflare have all web traffic routed through its intelligent global network, which gets smarter with every request. As a result, they see significant improvement in performance and a decrease in spam and other attacks.

About Aruba

Aruba, a Hewlett Packard Enterprise company, is the global leader in secure, intelligent edge-to-cloud networking solutions that use AI to automate the network, while harnessing data to drive powerful business outcomes. With Aruba ESP (Edge Services Platform) and as-a-service options, Aruba takes a cloud-native approach to helping customers meet their connectivity, security, and financial requirements across campus, branch, data center, and remote worker environments, covering all aspects of wired, wireless LAN, and wide area networking (WAN).