aruba

a Hewlett Packard Enterprise company

#### EBOOK

## How To Recessionproof Your Network

Modernizing a campus architecture using 5 key principles

INTRODUCTION

## Introduction

Today's enterprises, from the Fortune Global 2000 to small and medium-sized organizations, are weathering a storm of socioeconomic and geopolitical uncertainty – making it a challenge to conduct business as usual.

Already facing reduced or inflexible budgets, staffing shortages, and productivity losses from the pandemic, efforts to maintain business continuity have been harshly impacted. Now there are signs that the world may be headed into a recession, further exacerbating the ability to support new business initiatives.

Despite fears of a recession, we've seen IT priorities dramatically shift towards the adoption of cloud, AI and automation, and a unified infrastructure approach to mitigate technical concerns such as supporting hybrid work and improving IT efficiency.

A recent survey conducted by the <u>Harvard Business Review</u> said that 92% of executives rank cloud as "extremely" or "very important to their organization's future strategy and growth." On top of that, 83% of IT decision makers say they will increase or leave their investment in cloud-based networking unchanged. And 74% expect high levels of investment retention or growth in campus switching infrastructure<sup>1</sup>.



This eBook helps IT decision makers like you better understand the steps that you can take to help reinforce and recession-proof your network. INTRODUCTION

AI & AUTOMATION SECU

SECURITY FLEXIBILITY

## Introduce higher scale management capabilities for new connectivity requirements

As applications and services become increasingly distributed across campus and associated locations, VLAN sprawl and various moves, adds, and changes become progressively more complex to manage. Network modernization across your campus WLAN, switching, and WAN architecture can help keep you protected and equipped to handle the unexpected.

#### **Challenges:**

Networks based on traditional architectures use inefficient legacy tools to manage static policies and will struggle to accommodate and secure potentially hundreds of thousands of users and devices that require on-demand access and the best possible experience.

#### **Available solutions:**

- Use cloud-managed networking services like Aruba Central to replace onpremises appliances and their maintenance, while gaining cloud scalability, built-in security services, optimized WAN interconnects, and more.
- Use Aruba Central NetConductor to implement network overlays such as EVPN/ VXLAN at the control plane to optimize Layer 2 and layer 3 connectivity.
- Discover ways to improve Internet experience and scale, such as by evaluating the benefits and impact of moving to IPv6.



## Add AI and automation to enhance IT efficiency

As resource constraints continue, ensure your IT teams can remain focused on mission-critical activities by offloading common deployment and troubleshooting tasks. Take advantage of Zero Touch Provisioning (ZTP), user-driven self-onboarding, and AIOps based on a large and robust data lake to provide actionable network insight – streamlining problem resolution, optimization, and remediation efforts.

#### **Challenges:**

Scarce IT resources and the overwhelmingly manual processes required to set up and configure networks, devices, and clients take up over 50% of your team's time.

#### **Available solutions:**

- Aruba Central provides customizable and automated guest Internet access service, employee BYOD (endpoint) onboarding, and dynamic traffic shaping and routing to cloud and on-premises resources.
- Client Insights for AI-based client profiling helps IT teams understand what's on the network for security, bandwidth planning, and automated policy assignment and enforcement.
- Cloud-assisted infrastructure installation and Zero Touch Provisioning of access points, switches, and gateways reduce travel requirements and expenses associated with hands-on configuration.
- Always-on AlOps capabilities enhance your team's ability to troubleshoot network issues and improve user satisfaction.

#### What Network Managers see as AlOps' most important benefits



**44**<sup>%</sup> Network Optimization



**41%** Operational Efficiency



**40%** Improved Security/Compliance



**37%** Network Resiliency



32% Cost Reduction

# Build in security at the network edge

Take advantage of built-in Zero Trust Security frameworks to minimize protection gaps where it counts most – at the edge. By seeing and authenticating all connections, applying and enforcing role-based policies for least-privilege access to resources, and encrypting all traffic from the moment a user associates to your network, protections can be enhanced and cybersecurity risks reduced.

#### **Challenges:**

Maintaining separate tools that are not built to work together results in lengthy and costly integration efforts and can lead to security issues due to inconsistencies. Manual processes can lead to errors and inconsistencies, management complexities (as in the case of managing multiple VLANs and updating ACLs), delays in supporting business needs, and potential vulnerabilities from devices on the network not managed or secured by IT.

#### **Available solutions:**

- Ensure that every device on the network is automatically located and profiled with up to 99% accuracy by using Client Insights.
- Use Dynamic Segmentation to deliver unified policy enforcement across wired, wireless, and WAN infrastructure.
- Implement a NAC solution like Aruba ClearPass for industry-leading role- and device-based network access control even for multi-vendor networks that allows you to define policy once and enforce it consistently throughout the network.
- Utilize Aruba Central NetConductor as a centralized way to automate and orchestrate network and policy configurations across disparate locations without relying on manual configurations.

**57%** 

of respondents say their organizations have either deployed or will deploy Zero Trust



## **49**%

of respondents say their organizations have deployed or will deploy SASE architectures Ponemon Institute survey



IRITY <u>FLEXIBILITY</u>

## **Re-evaluate the flexibility of your architecture**

Rapidly changing business objectives require a network that can quickly — and automatically — adjust to new or changing conditions. Take advantage of new network architectures that allow you to switch to faster and smarter wired, wireless, or SD-WAN features and add more as needed.

#### **Challenges:**

Moving to a cloud solution has been delayed due to the inability to commit time and resources. In addition, IT must maintain separate on-premises and cloud experiences provided by different vendors for longer than desired.

#### **Available solutions:**

- Implement a cloud-native solution like Aruba Central (powered by HPE GreenLake) that can be deployed in the cloud and on-premises and simultaneously maintains data in a cloud hosting provider like Azure, AWS, or Google Cloud Platform and on-premises in your private data center.
- Verify that the cloud-native network management tools being evaluated can consolidate the functionality and scalability needed to support and maintain campus, branch, remote, data center, and cloud locations.
- Keep an eye on licensing terms to avoid lock-ins on current equipment and forced upgrades.



INTRODUCTION

AI & AUTOMATION SECURITY

ITY FLEXIBILITY

Today

### Choose a consumption model that better meets business outcomes, timelines, and budgets

Due to the impact of the pandemic and business continuity concerns, the industry has seen a shift in investment towards network as a service (NaaS) solutions. But rather than completely outsourcing IT, NaaS is quickly being redefined by its ability to enhance in-house IT capabilities with added flexibility. NaaS allows IT to focus on strategy, metrics, and business outcomes.

#### **Challenges:**

The network has been unable to provide an adequate quality of service required by the business. While a network upgrade has been planned, it's been difficult to acquire and implement due to a higher focus by IT and finance on other priorities. This has led to multiple postponements that have adversely affected employee productivity.

#### **Available solutions:**

- Enhance the reach and capabilities of IT by using a NaaS consumption model that accounts for peaks and valleys in network demand. This enables IT to seamlessly deliver new network capabilities that can dynamically meet business needs.
- Get exactly what you pay for by directly correlating Mean Time to Value for the campus network by optimizing budget and staff resources with the ability to scale up or down as needs change.
- Understand how the solution supports Zero Trust Security architectures because security implementations can have complexity, integration, reliability, and performance implications.

of ITDMs estimate they

consume at least half of their IT solutions 'as a service'

Asked to estimate the likely situation in 12-24 months' time, that proportion shot up to 41% an increase of almost

FLEXIBILITY

UMMARY

# The theme of 2023: Modernize your campus architecture

The 5 steps outlined in this eBook provide a foundation to help your IT team better achieve their mission objectives. They can be implemented in any order or combination and can support additional priorities unique to your business. Learn more about Aruba solutions by accessing resources available on <u>Unified Infrastructure campaign page</u> or by contacting your Aruba sales representative.

#### The bottom line:

- Accelerate the time to deploy new network solutions from days and weeks to minutes – when you need to most.
- Support consistent user experiences from the edge to the cloud – so your users can remain connected.
- Adopt new consumption models based on business priority – relieving budget and staff constraints.
- Automate complex network and security processes to enhance IT capabilities.
- Reduce the time it takes to troubleshoot issues with AI-powered analytics.





a Hewlett Packard Enterprise company



BlueAlly Technology Solutions, headquartered in Cary, NC, has been delivering comprehensive IT solutions to businesses of all sizes, government entities, educational institutions, and regulated industries nationwide since 1999. The company is focused on security governance & compliance, cloud & infrastructure, and application & automation, and offers consulting and managed services in these solution categories.

1.844.356.5141

Sales@SecureWirelessWorks.com

www.SecureWirelessWorks.com

© Copyright 2023 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.