Reimage The Workplace

Empowering Users to Move Seamlessly, Securely and Safely between Home and Office

Sriharsha Narasimhan CTO, Aruba India



Sriharsha Narasimhan

Sriharsha Narasimhan is Chief Technology Officer for Aruba, Hewlett Packard Enterprise. His core responsibilities include driving technology and strategic initiatives around Digital Experiences, Network Analytics, Network Security, Location Based Services, IT-OT and IoT across industry verticals. He is with Hewlett Packard for over 19 years and held multiple roles across strategy, management, engineering, and solution architecture.

Sriharsha has over 32 years experience as an IT professional with expertise in architecture, design, and development of embedded & enterprise solutions across market verticals. Prior to joining Hewlett Packard in 2001, he has worked for multiple organizations in India and USA, where he successfully lead teams in product development & engineering, sales and management areas.



Agenda

- Post Pandemic Challenges
- Aruba's Vision and Approach
- Recommendations for Hybrid Workplace
- Technology Enablers
- Summary
- sriharsha.narasimhan@hpe.com
- sriharshaz @sriharshaz
- in https://www.linkedin.com/in/sriharsha-narasimhan/





BUSINESSES FORCED TO TRANSITION TO A HYBRID WORKPLACE



Phase 1 Jan – Mar 2020

Transition to work from home with connectivity and security taking center stage



Phase 2 Jul – Sep 2020

Enabling a safer return to the office and campus with an emphasis on use cases such as contact tracing



Phase 3 2021+

Reimagining the Hybrid Workplace and adapting to the "New Normal"



THE "NEW NORMAL" CREATES SIGNIFICANT CHALLENGES FOR IT TEAMS



Widespread impact on employees and IT projects with significant budgetary headwinds



IT requirements are less predictable, increasingly fluid, and require the agility and flexibility that comes with Cloud infrastructure



IT professions are looking for a more automated approach that leverages technologies like Al

IT LEADERS PLAN TO INCREASE THIER SPENDING IN CLOUD NETWORKING BY 38% and AI BY 35%



Source: Aruba Edge Study 2020





TOP CONSIDERATIONS FOR BUILDING A HYBRID WORKPLACE

What kind of workplace suites my organization?

Which roles and personalities thrive in a remote work environment? Which find it more challenging?

How do I maintain company culture with an increasingly distributed workforce?

How can technology make the workplace more flexible, healthy and productive?

RECOMMENDATIONS FOR IT PROFESSIONALS

Create locationindependent productive work environments

Leverage the power of Al and Cloud to automate and simplify manual tasks

Use network intelligence to operationalize preventative and reactive health and safety measures

Phase 1: Enable Secure Work From Home

Priorities and Pain Points

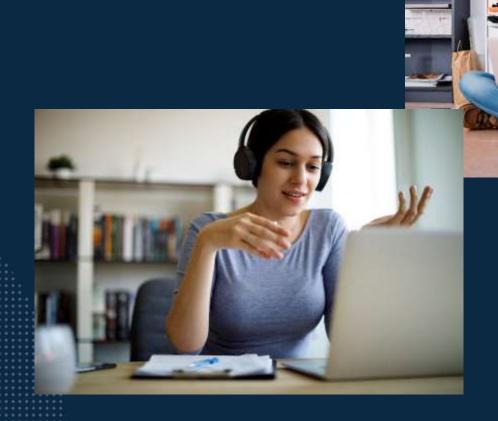
Easily installed remote connectivity

Re-creation of Corporate office environment

Corporate security policies

Enterprise scale

Centralized management





Phase 1: Enable Secure Work From Home

Aruba Solutions

Easily installed remote connectivity

Re-creation of Corporate office environment

Corporate security policies

Enterprise scale

Centralized management



Aruba Virtual Internet Access

Single worker requiring remote access using a device running Window, MacOS, IOS, Android, or Linux



Aruba Remote Access Point

Corporate network projected to home

Redundant WAN links; Wi-Fi 6 and WPA3 ready



Aruba Instant VPN

Multiple workers with multiple wired or wireless devices in branch offices or remote offices

Secure and office like access to Corporate Executives and critical teams, like legal, finance, controllership, customer service with plug-n-play convenience



Phase 2: Return to office

Priorities and Pain Points

Establish employee confidence through enhanced health and safety processes

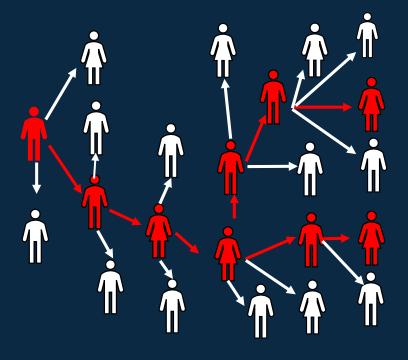
Leverage current Aruba Infrastructure

Security and privacy

Track and optimize sanitization activities

Minimize adverse publicity







Employee Health and Safety

Authorized for RTO, Health check and compliance monitoring







Revised Security Check for employees

- Authorized to work in office (that day)
- Healthy to enter office
- Adhere to new safety / sanitary norms

Regulatory Compliance Requirements

- ✓ Log employee presence + health data
- ✓ Monitor occupancy & density levels
- Accelerate discovery & investigation



Connectivity and Location Services already available

Natively generated location data to power contact and location tracing



Aruba 300 and 500 Series
Access Points



Aruba Meridian based app and Asset Tags



CONTACT AND LOCATION TRACING

With WI-FI Location Data





Locations traced listing dwell time at various AP/building locations for sick person.

ingested from Airwave or Central

with AI/ML Proximity Models



HR informed of potential sick person **Contacts traced** (sorted by total contact minutes) with each infected person

CONTACT AND LOCATION TRACING

With Meridian and BLE Location Data



Users are issued Aruba Tags



Aruba 300/500 series APs sense tags in-building



Meridian cloud determines tag locations



Data streamed to visualization and rules engine SW



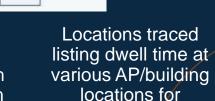
User is sick and informs HR



HR looks up user tag and queries contact tracing SW for potential user and location contacts



Contacts traced (sorted by total contact minutes) with each infected person



sick person.





NETWORK INTELLIGENCE: IMPACTING PHYSICAL WORLD





Bluetooth 5



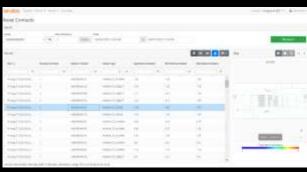


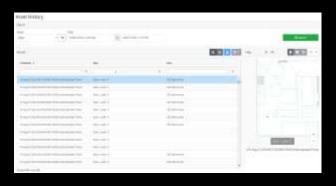


NETWORK INTELLIGENCE: CONTACT TRACING SOLUTION











Network Should Provide More Than Connectivity

Analytics to address compliance to max capacity, social distancing and contact tracing

Solutions from Aruba Technology Partners







Proximity Detection | LBS Campus App | Touchless Kiosks | Spatial Analytics | Thermal Imaging













Phase 3: Hybrid Workplace

Priorities and Pain Points

Traditional office space transitions to more on-demand and modular

Focus on "touchless"
& autonomous
workplace
technologies

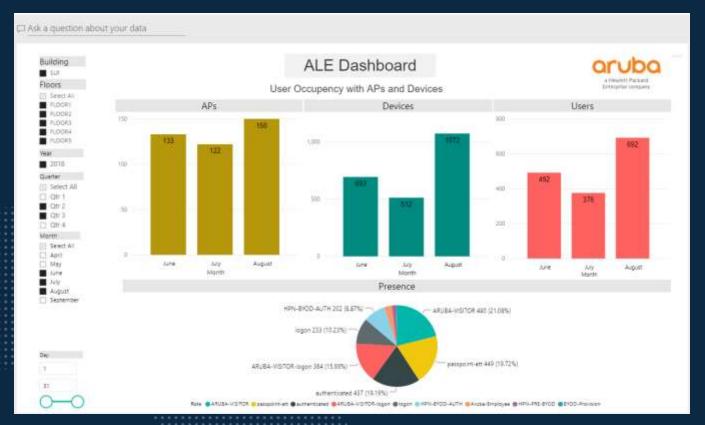
Increased collaboration between facilities and IT teams



Mobility is key

Aruba on Aruba: Rich insights on space usage trends

Aruba leveraged this data for real estate planning and now RTO planning



Improve employee office experience with realworld insights to repurpose or increase "touchless" capabilities (like voice command, mobile controlled, focused IoT automation)





Aruba on Aruba: Supporting the New Normal

How is IT supporting Business

End user support increased initially and then leveled off

Video conferencing load nearly doubled



Campus guest registrations dropped

VPN Usage increased approx. 40%

What is the journey to Hybrid Workplace

- Create a low-touch environment
- Use data to manage density
- Introduce flexibility in space management
- Seamlessly fuse physical architecture and technology
- Indoor wayfinding, find colleagues and resources in real-time

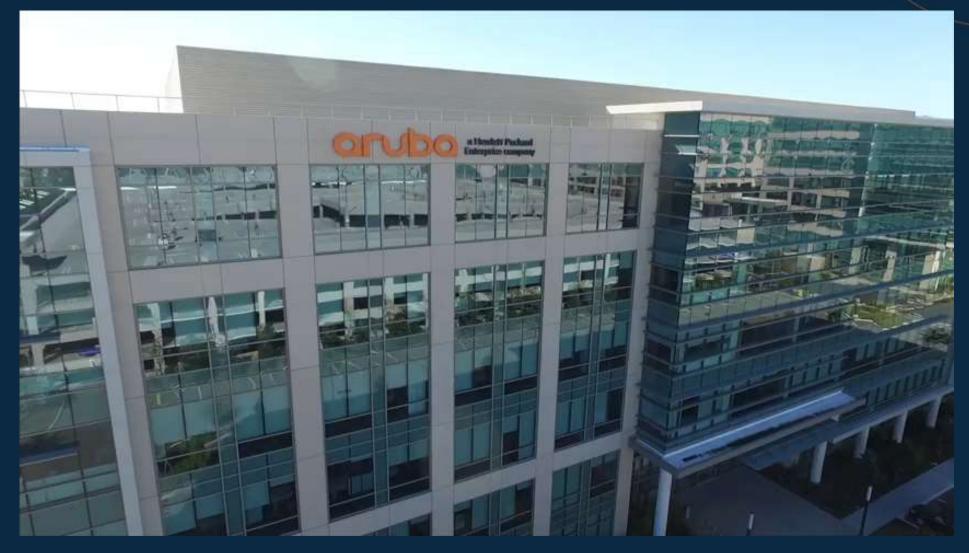
- Explore next generation office solutions
- Transition all employee interactions to touchless
- Address deep-seated cultural behavior
- Incidence driven sanitization strategy

Enhance Employee Experience – and Productivity





Aruba Campus – Touchless Ready Smart Workplace





Aruba Campus – Touchless Ready Smart Workplace

Technologies to enable to return to Contactless Workplace



Campus App



Map Management



Visitor Management Solution



Paperless Visitor Management



Guest Wi-Fi enrollment automation



Host notification automation



Meeting room reservation solution



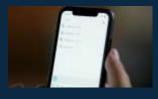
Reserve meeting room with campus app



Work desk reservation automation solution



Locate Work desk using campus app



Find resources using campus app



Locate resources using campus app



Find people using campus app



Locate people using campus app



Work from anywhere in office



Creating new physical resource



Mapping new physical resource



Locate new physical resource using campus app



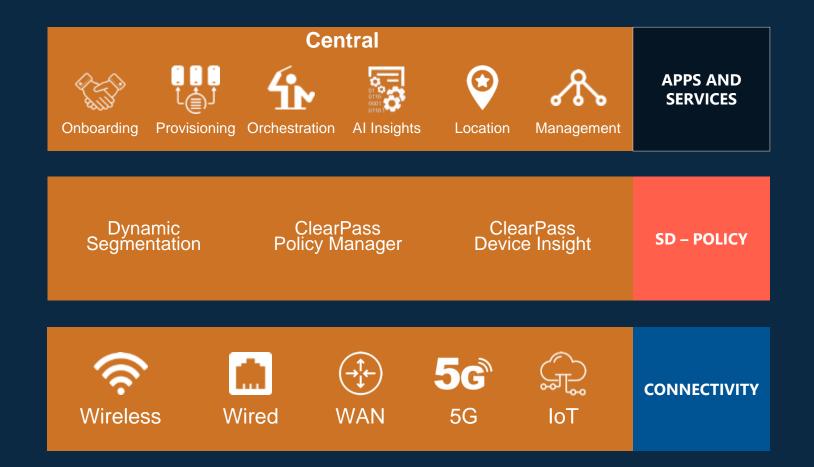
Allotting employee seat for the day

Evolving employee experiences from 2016 onwards



Shift in consumption of information and insights **Covid-19 Pandemic Requirements End-User** Computing **Facilities** IT Operations Corporate Covid-**Location & Analytics** Real LOB **Facilities** Services Estate Heads 19 **Stakeholders** Customer Experience Human Resources HR Marketing

THE ARUBA Edge Services Platform Architecture



INTRODUCING ARUBA ESP

AIOPS

Al Insights | User Insights



UNIFIED INFRASTRUCTURE

Wi-Fi | Switching | SD-WAN | 5G | IOT



ZERO TRUST SECURITY

Dynamic Segmentation | Device Insight



Financial and Consumption Flexibility -

HPEFS | SaaS | NaaS



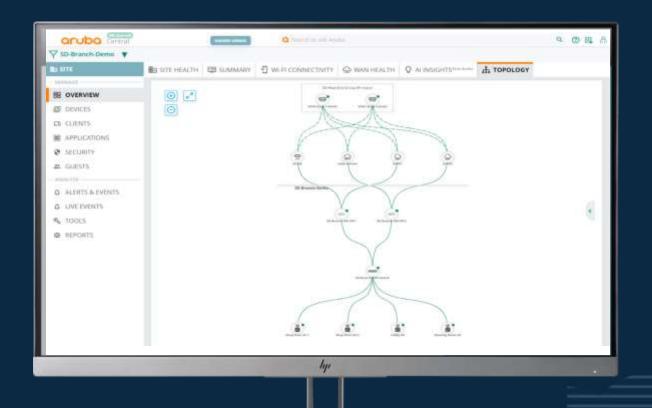


SIMPLIFY DAILY OPERATIONS WITH A UNIFIED INFRASTRUCTURE

Bringing the Cloud Experience to the Edge

Cloud-native, single pane of glass across campus, branch, data center and remote worker; wired, wireless, SD-WAN

Enterprise scale





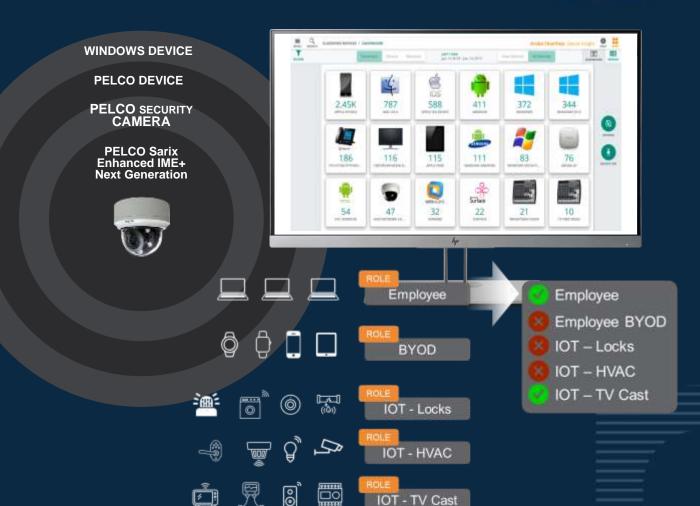


PROTECT WITH A ZERO TRUST NETWORK

Machine learning-based automated device discovery, profiling Role-based policy

Integrated with policybased access control

Dynamic Segmentation





ARUBA AIOPS REDEFINING IT OUTCOMES

React and Resolve Issues Quickly

Predict and Preempt issues before they impact users or the business

Continuously Optimize to ensure SLAs are met





Future Hybrid Workplace

Connecting the physical office with the "Edge"

Blend of remote and on-site workers

Remote "Edge"

Additional @Home investments around on-premises equipment and ISP backhaul





New network and workplace tech investments

- "Location-aware "office
- Space planning & contact tracing

Supporting a hybrid workplace through a location-aware mobile app & IoT

Convenience & Safety

- Health assessments & touchless reservations
- Realtime space info (e.g. conf rms, desks)
- Digital badging

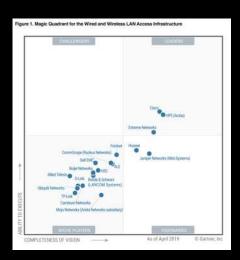
Community

- Latest company news & site info
- Townhall & all-hands events

ARUBA SWEEPS INDUSTRY RANKINGS

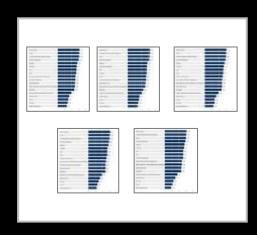
Gartner

Magic Quadrant



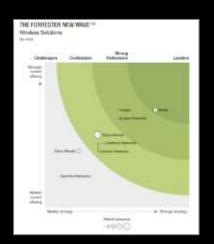
Gartner

Critical Capabilities



FORRESTER®

New Wave





WLAN Tracker





THE ARUBA Edge Services Platform Architecture



Summary

- Aruba Hyper aware smart building approach enables organizations to create safer and healthier workplaces
- Aruba Wireless infrastructure can provide contextual data to enable touchless experiences
- Aruba Location Services solutions have been implemented in Workplaces, Airports, Stadiums, Museums, Hospitals, Education institutions, Hospitality, and many more
- Aruba Wired, Wireless, SD-Branch, RAP, and VIA solutions enable Organizations to rapidly adapt to changes brought around by Pandemic
- Aruba Meridian and technology partner solutions can provide detailed real-time guidance to employees in office











sriharsha.narasimhan@hpe.com



@sriharshaz



in https://www.linkedin.com/in/sriharsha-narasimhan/