

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

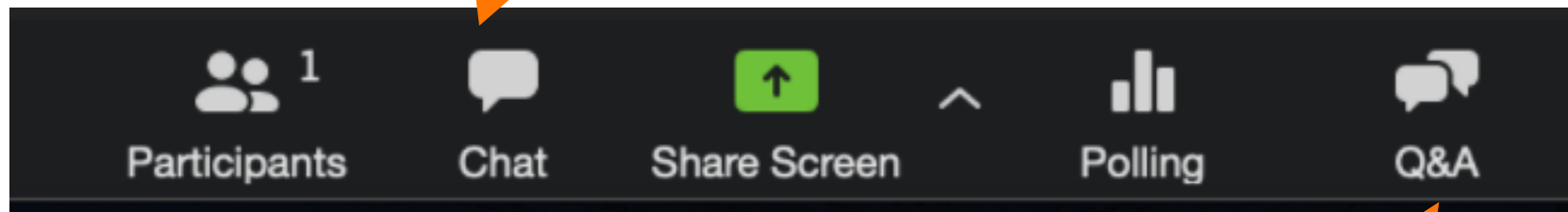
**aruba**  
a Hewlett Packard  
Enterprise company

TECH TALK

**aruba**  
a Hewlett Packard  
Enterprise company

# House Rules

**Please post your Quiz responses here**



**Please post your questions here**



# Quiz Winners

Balaji Nagarajan, Precision IT

Ramachandra Mithbavkar, Savex

Dipak K, Creative Infotech

Sathish Narayanan, Savex

Ankit Garg, SBI



*Congratulations*



# Mahesh Kumar G

Manager-System Engineering  
Aruba India

- 20+ Years of experience in Networking industry
- 12+ Years with HPE in various roles
- A technology enthusiast
- Customer-centric
- Open Networking evangelist
- Trusted advisor and a team player
- Happy to be of any assistance
- Reach me
  - [mahesh-kumar.g@hpe.com](mailto:mahesh-kumar.g@hpe.com)
  - 9900328879
  - <https://www.linkedin.com/in/maheshkg/>





**aruba**

a Hewlett Packard  
Enterprise company

**TECH TALK**

**Aruba Solutions For  
Education Vertical**

# DRIVING EXPERIENCES AT THE INTELLIGENT EDGE



WORKPLACES



RETAIL



INDUSTRIAL



SCHOOLS  
COLLEGES  
UNIVERSITIES



STADIUMS



HEALTHCARE



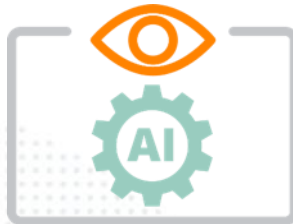
HOSPITALITY

# ARUBA EDGE SERVICES PLATFORM (ESP)

The foundation for digital transformation in Higher Education

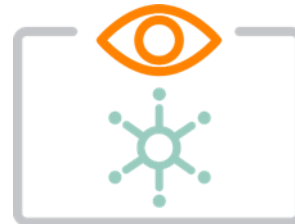
## AIOPS

Insights | User Insights



## UNIFIED INFRASTRUCTURE

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



## ZERO TRUST SECURITY

Dynamic Segmentation | Device Insight



## Financial and Consumption Flexibility

HPEFS | Managed Connectivity Services



A man with dark hair and glasses, wearing a white button-down shirt, is seated at a wooden desk. He is looking down at a silver laptop, with his hands on the keyboard. In front of him is a light-colored ceramic cup on a saucer. The background is a softly lit office or home workspace with a window and some shelves. The overall mood is professional and focused.

aruba

a Hewlett Packard  
Enterprise company

# #infrastructure

## Matching evolving Campus needs to IT needs



# ARUBA **WI-FI 6**



## **ARUBA 500 SERIES**

Hostel Rooms  
Guest Rooms  
Remote AP

## **ARUBA 510 SERIES**

Corridors

## **ARUBA 530 SERIES**

Class Rooms  
Labs

## **ARUBA 550 SERIES**

Auditoriums  
Seminar Halls

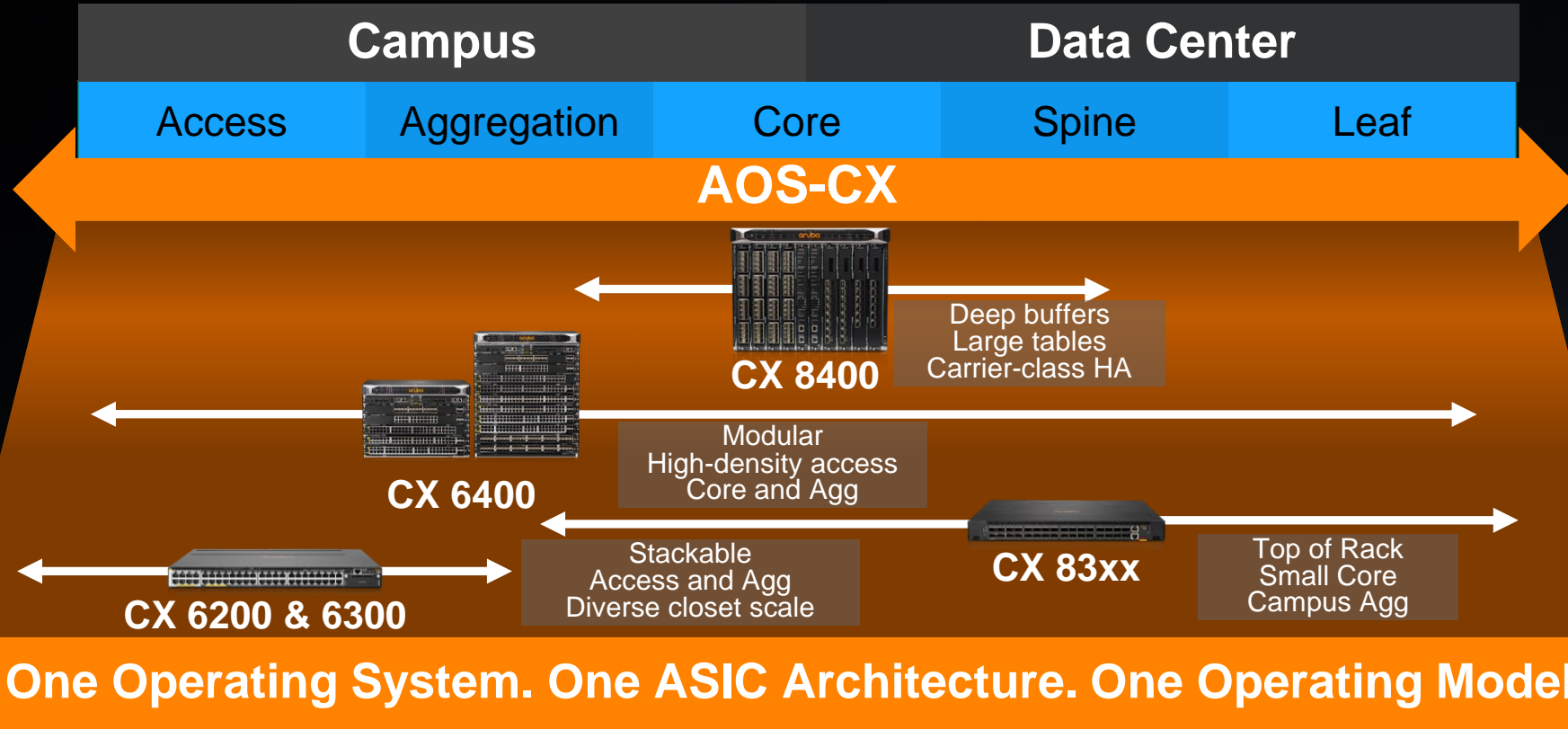
## **ARUBA 560/570 SERIES**

Play Ground  
Parking Lot

- Smart PoE
- BLE & Zigbee Radio
- ClientMatch
- AirMatch
- Air Slice
- WPA3
- AI and Green AP
- Live Upgrade

# ARUBA CX SWITCHING

## COMPLETE END-TO-END SWITCHING PORTFOLIO



# ARUBA SDWAN



Main Campus or Cloud



Headend Gateway



**Branch GW**

Other colleges, distance learning centers



**IAP-VPN**

Small learning branch or remote staff offices



**Remote AP**

Extends university to the home



**VIA**

Soft client for single devices

Windows

MAC

IOS

Android

Chromebook

Linux

# UNIFIED INFRASTRUCTURE FOR EDUCATION

Bringing the Cloud Experience to the Edge

Single architecture for Wi-Fi, Wired, WAN; campus, branch, data center and remote worker

Controller-less cloud-native operations at Enterprise scale



Access Point



Access Switch



Branch Gateway



Virtual Gateway



Headend Gateway



VPN Client



UXI Sensor



Core/Aggregation



Top of Rack



Air Pass (Wi-Fi onramp to 5G)



aruba

a Hewlett Packard  
Enterprise company

#security

Increasing number of Devices & Users  
In The Campus

# SECURITY THREATS INCREASE NETWORK COMPLEXITY



**STUDENTS  
BYOD  
IOT**

```
access-list 11 permit udp any any eq domain
access-list 11 permit udp any eq domain any
access-list 11 permit tcp any any eq domain
access-list 11 permit tcp any eq domain any
access-list 11 permit tcp any 10.11.12.0/24 eq ftp
access-list 11 permit tcp any 10.11.12.0/24 eq ftp-data established
Access-list 11 deny any any
vlan 100
 name user-vlan
 interface vlan 100
 ip address 10.11.55.0 255.255.255.0
 ip access-group 11 in

ip vrf byod
vlan 101
 name byod-vlan
access-list 12 permit
interface vlan 101
 ip address 192.168.100.0 255.255.255.0

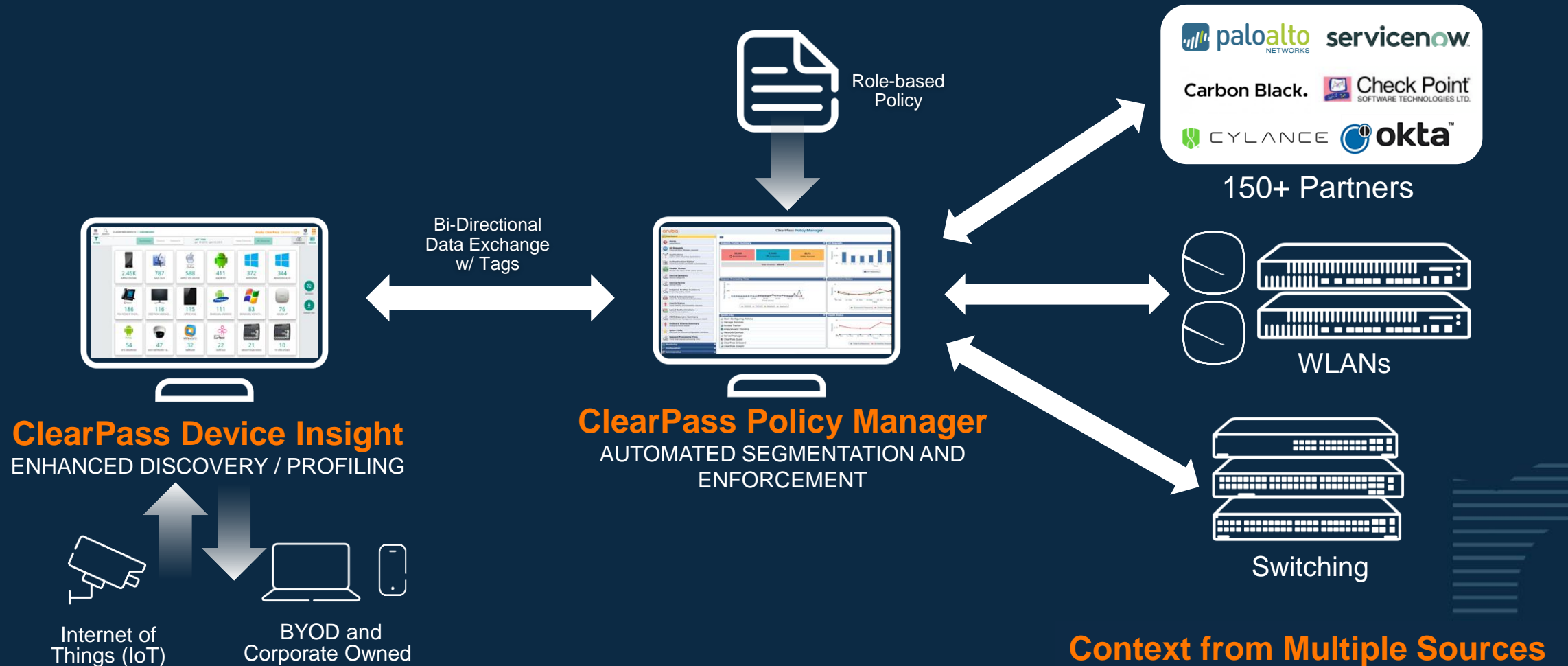
vlan 102
 name IOT-Camera
vlan 103
 name IOT-Lights
vlan 104
 name IOT-HVAC
vlan 105
 name IOT-Locks
vlan 106
 name IOT-WaterSensor
vlan 107
 name IOT-SmokeAlarm
vlan 108
 name IOT-Audio
```

Complex hop-by-hop  
IP-based segmentation  
slows the deployment of  
new devices on the  
network

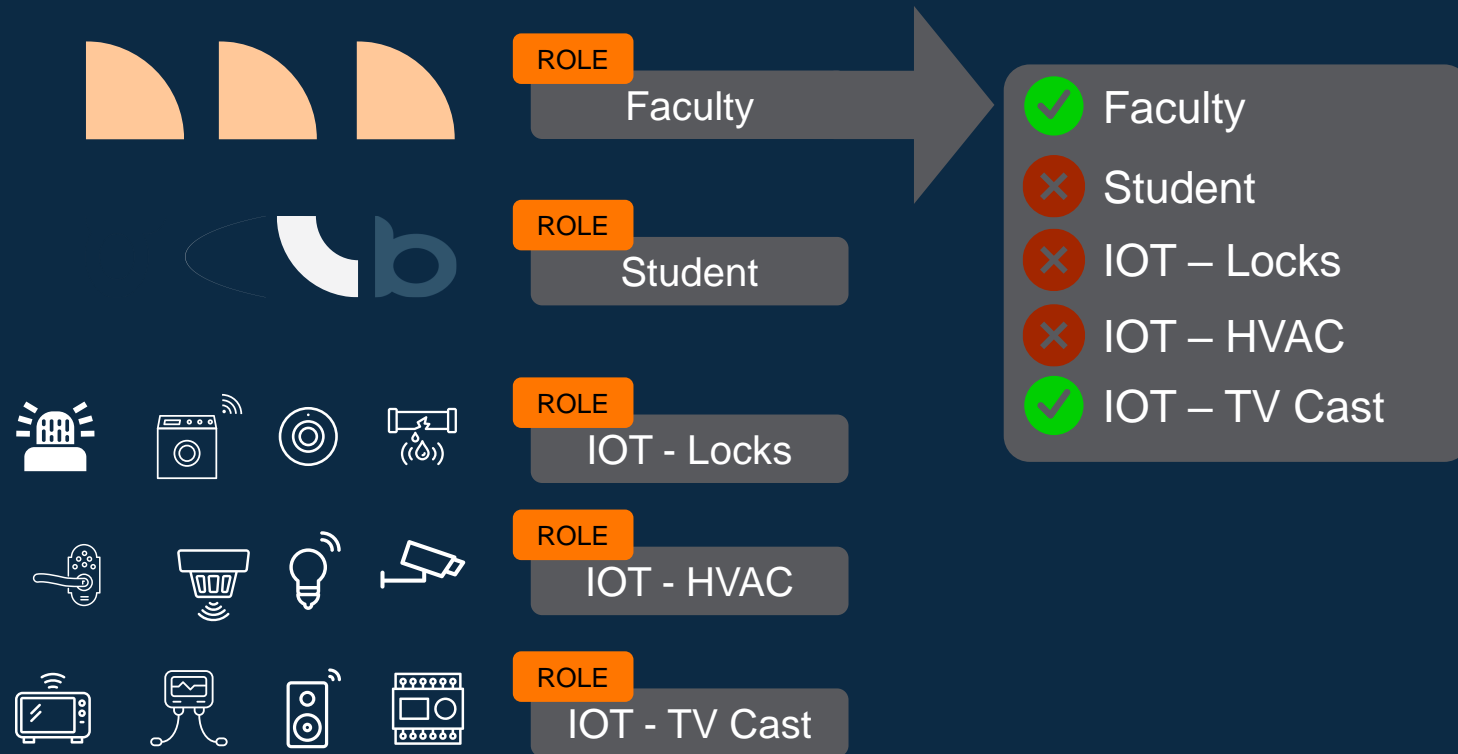
ACLs either become  
unmanageable or are  
nonexistent ultimately  
leading back to security  
struggles



# ZERO TRUST FRAMEWORK POLICY MANAGER



# ZERO TRUST FRAMEWORK PROTECTS AND SIMPLIFIES



## DYNAMIC SEGMENTATION

Software defined approach eliminates VLAN sprawl and complex enforcement rules

Delivers wired and wireless micro-segmentation at a Campus or Branch to secure endpoints based on Role

Helps implement a **Zero Trust Network**



# ZERO TRUST SECURITY FOR EDUCATION



## Zero Trust Security

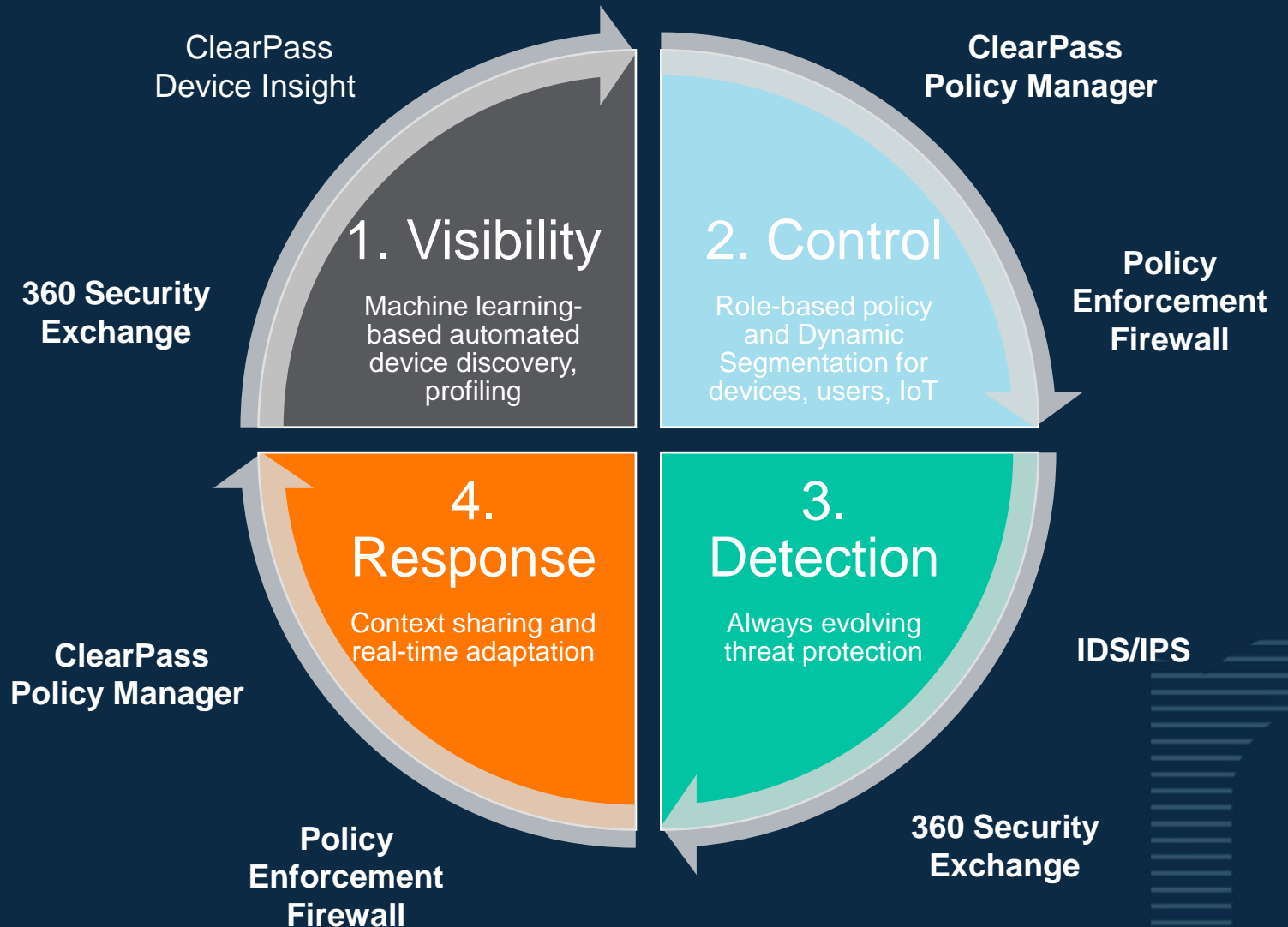
Dynamic Segmentation | Device Insight

**Provide secure guest Wi-Fi**  
with automated segmentation

**Ensure PCI compliance**  
separate traffic

**Deploy new IoT devices**  
and automate policies

**Adapt to potential threats**  
on faculty/staff/student devices



The Aruba logo is displayed in white lowercase letters. The background of the entire image is a blurred photograph of a person's face on the left and a self-service kiosk on the right. The kiosk features a large screen showing a woman's face, a numeric keypad, and blue directional buttons. A hand is holding a smartphone in front of the kiosk. A semi-transparent dark blue horizontal band is overlaid across the middle of the image, containing the main text. The top right corner has a red dotted pattern.

aruba

a Hewlett Packard  
Enterprise company

# #management Limited IT Staff For Network Management

# ARUBA ESP SINGLE PANE OF GLASS

## ARUBA CENTRAL



## NETWORK INFRASTRUCTURE



ACCESS POINTS



SWITCHES



BRANCH GATEWAY

## SERVICES

GUEST  
WI-FI

NETWORK  
ANALYTICS

PRESENCE  
ANALYTICS

SD-WAN

SECURITY

VISIBILITY | CENTRALIZED MONITORING AND MANAGEMENT

SUBSCRIPTION LICENSE | SOFTWARE SUPPORT

# USER'S PERSPECTIVE USER EXPERIENCE INSIGHT



aruba

Experience

- Boardroom
- Conference Room
- Lobby
- Main Office
- New York Office

WiFi

- Stark Guest WiFi
- Stark Secure

Network

- DHCP
- DNS

Internal

- 3rd Floor Printer
- AWS Server
- Captive Portal
- Microsoft Exchange
- Salesforce

External

- Dropbox
- Facebook
- Gmail
- Google Apps
- YouTube



# ARUBA AI OPS FOR EDUCATION



AI Insights | User Insights

**Understand user experiences**  
by leveraging analytics

**Prioritize applications**  
like synchronous instruction

**Roam the campus**  
with high-performing Wi-Fi

**Stay ahead of issues**  
For high stakes testing ensuring no  
downtime



**Insights**

**Predict and  
Preempt issues  
before they  
impact  
learning**



**Resolve**

**React and  
Resolve Issues  
Quickly**



**Optimize**

**Continuously  
Optimize to  
ensure SLAs  
are met**

A large industrial robotic arm, primarily white with yellow accents, is positioned in a factory environment. The background shows various industrial components and machinery. The scene is dimly lit, with a dark blue overlay on the right side of the image.

aruba

a Hewlett Packard  
Enterprise company

#experience

Leverage IT Infrastructure For Enhanced  
Campus Experience

# ACCESS POINT AS IOT PLATFORM

Wi-Fi 6 | Bluetooth 5 | Zigbee Radio | Smart PoE



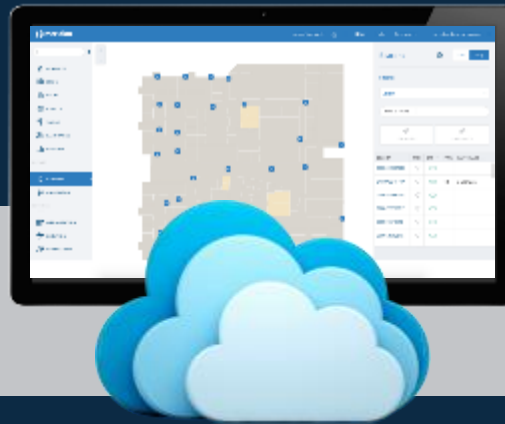
# MOBILE ENGAGEMENT TRACKING & LOCATION SERVICES



Mobile App



Aruba  
AP & Tags



Aruba  
Meridian  
With SDK



Aruba  
AP & Beacons



Mobile App



A large industrial robotic arm, primarily white with yellow accents, is positioned in a factory environment. The background shows various industrial components and machinery. The image is overlaid with a dark blue semi-transparent shape in the top right corner and a white dotted pattern in the bottom left corner.

aruba

a Hewlett Packard  
Enterprise company

#newnormal  
Getting back to campus

# RETURN TO COLLEGE & UNIVERSITY PRIORITIES

## Space Utilization

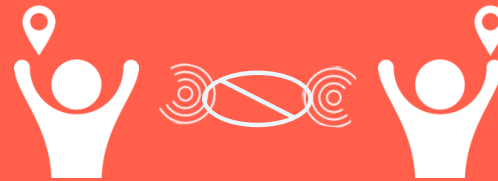


- OPTIMIZED CLEANING
- DENSITY MONITORING FOR SHARED LOCATIONS

Wi-Fi and Aruba Central



## Proximity Alerts



- MOBILE APP
- BUILT ON MERIDIAN

BLE, Aruba Meridian, Ecosystem



## Contact Tracing



- SHARED SPACES
- PATTERNS OF CONTACT

Wi-Fi and Aruba Central



A large industrial robotic arm, primarily white with yellow accents, is positioned in a factory or laboratory environment. The background is dark and slightly blurred, showing other industrial equipment. The overall lighting is dim, with some highlights on the robot's joints and components.

aruba

a Hewlett Packard  
Enterprise company

**#learnaruba**

Helping your students grow their career

aruba

a Hewlett Packard  
Enterprise company

ARUBA  
ACADEMY



Mobility



Switching



Security



Design



A large industrial robotic arm, primarily white with yellow accents, is positioned in a factory environment. The background shows various industrial components and machinery. The scene is dimly lit, with a dark blue overlay on the right side of the image.

aruba

a Hewlett Packard  
Enterprise company

# WHY ARUBA





**Education**  
is Aruba's largest  
vertical for  
a reason



**Top & Prestigious  
Colleges in India  
have Aruba Solutions  
deployed**

**Experience Aruba**

**7 of 8**  
Ivy League schools  
leverage Aruba  
solutions



**2500+**  
Universities deploy  
Aruba WLAN





# Indian Institutes who choose Aruba

Few of the Many who trust Aruba!

Technical Institutes | Management colleges | Research institutes | Arts & Commerce



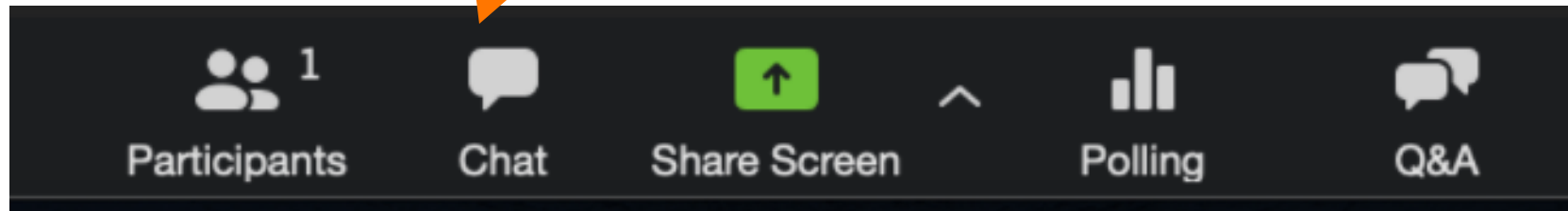


The background is a dark blue color. In the top-left corner, there is a large, solid orange-red circle. A large, semi-transparent pattern of small white dots is overlaid on the right side of the image, forming a shape that resembles a stylized 'Q' or a large letter. The text 'Quiz Time' is centered in the left half of the image.

**Quiz Time**

# House Rules

Please post your Quiz responses here





# Question 1:

Which of the following Aruba Wi-Fi APs is best suited for hostel rooms?

- a. Aruba AP515
- b. Aruba AP535
- c. Aruba AP503H
- d. Aruba AP565

Correct Answer: **C**



**Aruba AP503H**

## Question 2:

Which of the following are key components of Aruba Zero Trust Infrastructure? (Select two)

- a. Aruba UXI Sensor
- b. Aruba ClearPass Policy Manager
- c. Aruba AIOps
- d. Aruba ClearPass Device Insight

Correct Answer: **B & D**

**ClearPass Device Insight**  
ENHANCED DISCOVERY / PROFILING

**ClearPass Policy Manager**  
AUTOMATED SEGMENTATION AND  
ENFORCEMENT



## Question 3:

In which of the following deployment models Aruba Central can be procured?

- a. Cloud-model
- b. Managed Services-model
- c. On-Premises model
- d. All of the above

Correct Answer: **D**

**Aruba Central**  
CLOUD|MSP|ON-PREMISES



## Question 4:

Aruba Meridian location services platform leverages which of the following technology on Aruba APs and beacons?

- a. Wi-Fi6
- b. Bluetooth Low Energy (BLE)
- c. ZigBee
- d. WPA3

Correct Answer: **B**





## Question 5:

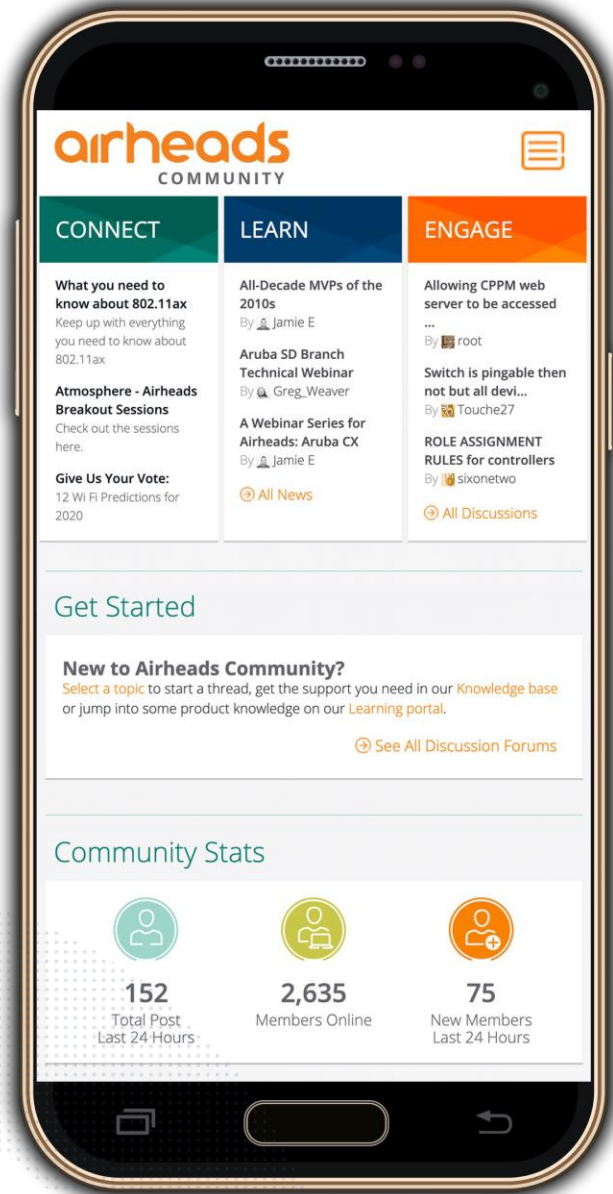
Which of the below Aruba products can be deployed over a non-Aruba Infrastructure? (Select two)

- a. Aruba ClearPass
- b. Aruba UXI Sensor
- c. Aruba Central
- d. Aruba Asset Tags

Correct Answer: **A & B**

**Trojan Horses**  
CLEARPASS|UXI|





# airheads

## COMMUNITY

Still not a part of the Airheads Community?  
Sign up today!

[community.arubanetworks.com](https://community.arubanetworks.com)





**Thank You**