ARUBA '22
BALTIC DAY

SOLVING
NETWORK MODERNIZATION
CHALLENGES

Dobias van Ingen
Aruba EMEA CTO & Sr. SE Director

YOUR PAIN POINTS

Hybrid Work

Digital Transformation Acceleration

Personalized Experiences

Need for Efficiencies

THE FUTURE IS
EDGE-TO-CLOUD

INTELLIGENT EDGE

HYBRID CLOUD

Users.
Devices.
Things.
Data.

Highly
Distributed

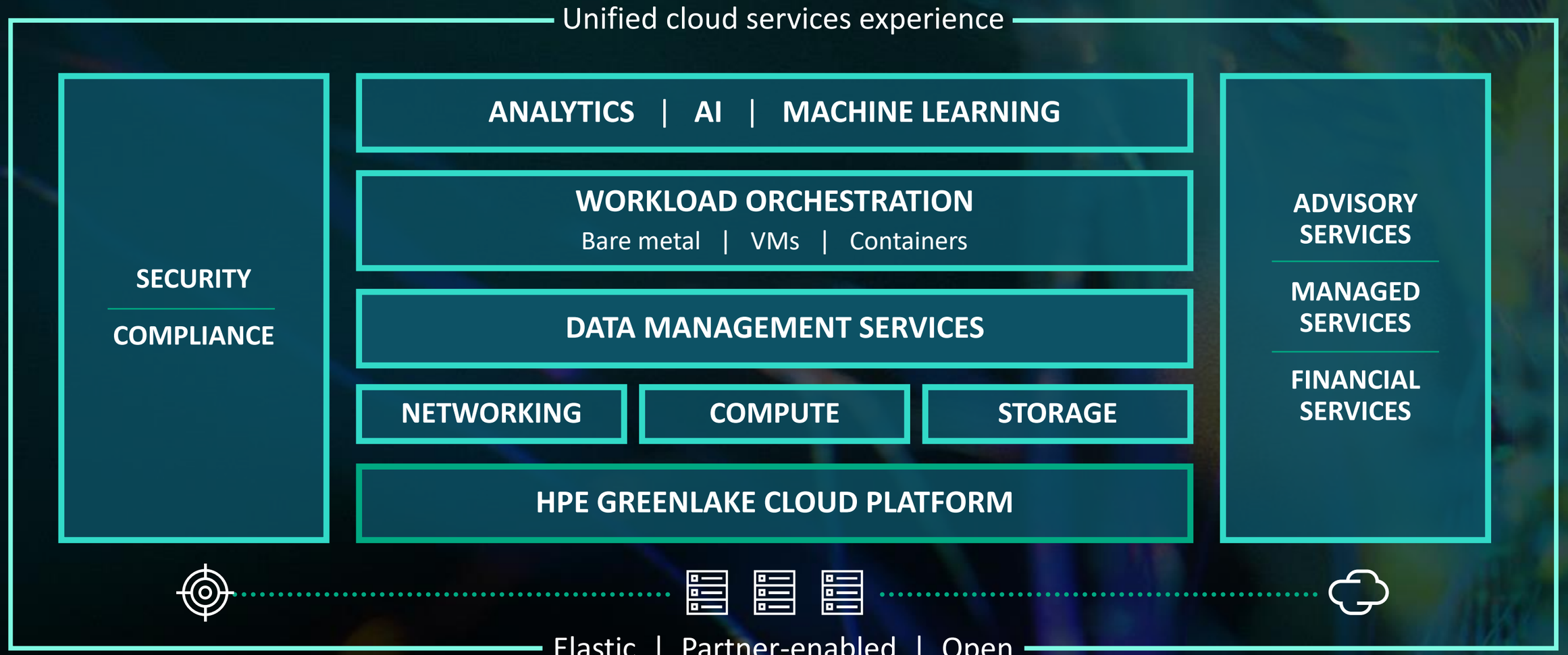
Fully
Automated

Cloud
Managed

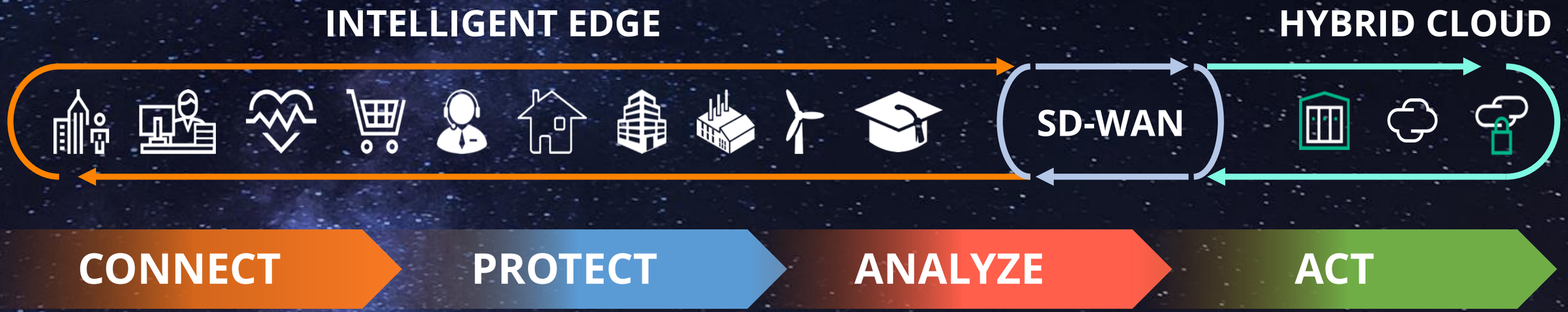
As-a-Service
Multi Cloud
Data Center
SaaS

WAN AND SECURITY TRANSFORMATION

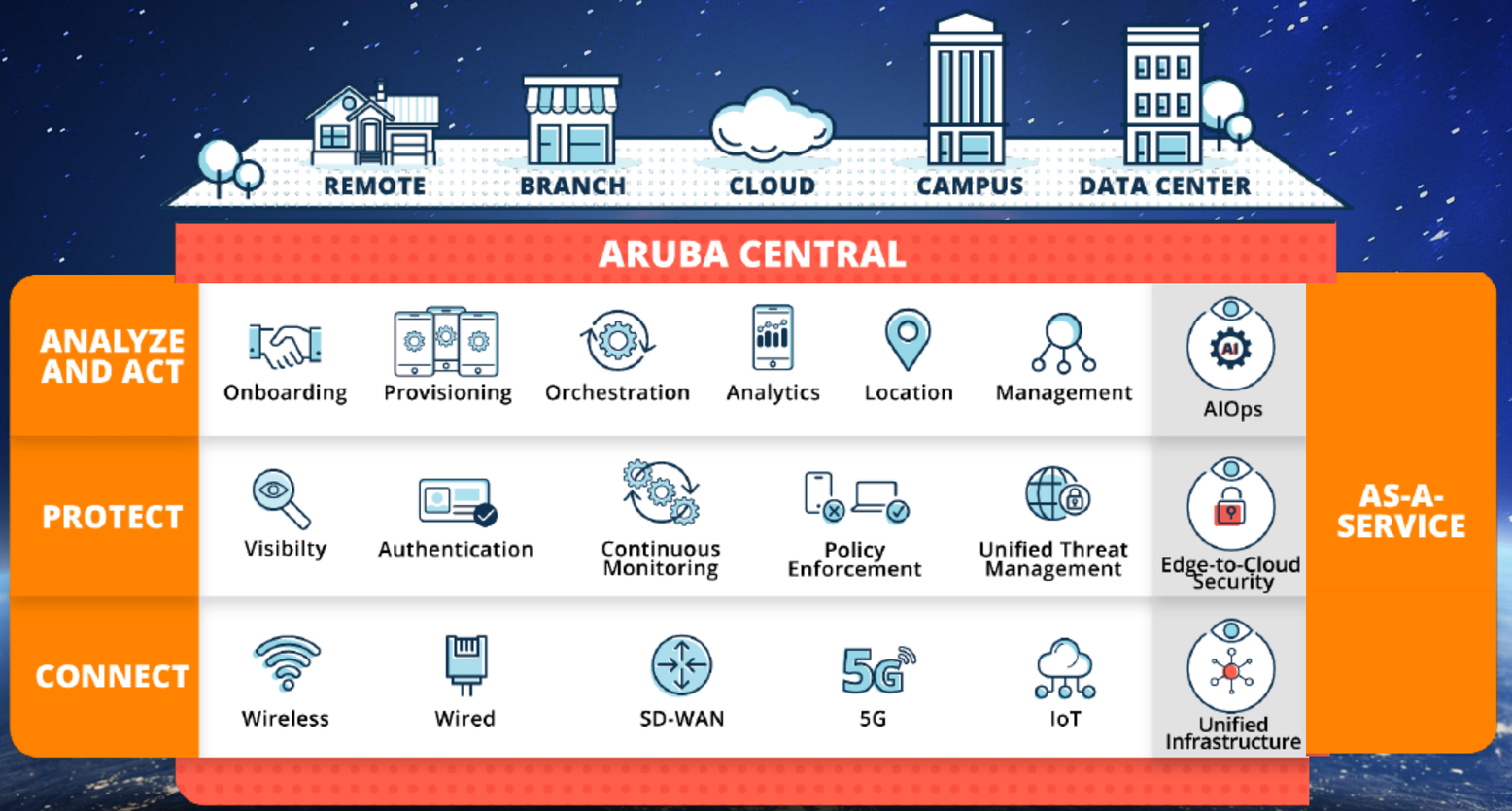
HPE GREENLAKE
Edge-to-cloud platform



ARUBA FRAMEWORK



ARUBA ESP SOLUTIONS FOR NETWORK MODERNIZATION



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Enterprise company

UNIFIED INFRASTRUCTURE
CONNECT

aruba

- First Enterprise grade 6E to market
- Great for high density
- Building out full portfolio
- Already looking to the future

ARUBA NETWORKS
IoT APPROACH

BLE

ZIGBEE

USB

3RD PARTY

ARUBA ECOSYSTEM PARTNERS

ZEBRA
ses imagotag
SOLUM
HermanMiller
Patrocinium
EnOcean
ASSA ABLOY
SIEMENS
SpaceIQ
ABB
Wiliot
HID
GE Healthcare
STANLEY Healthcare
HYPROS
dormakaba

...and many more

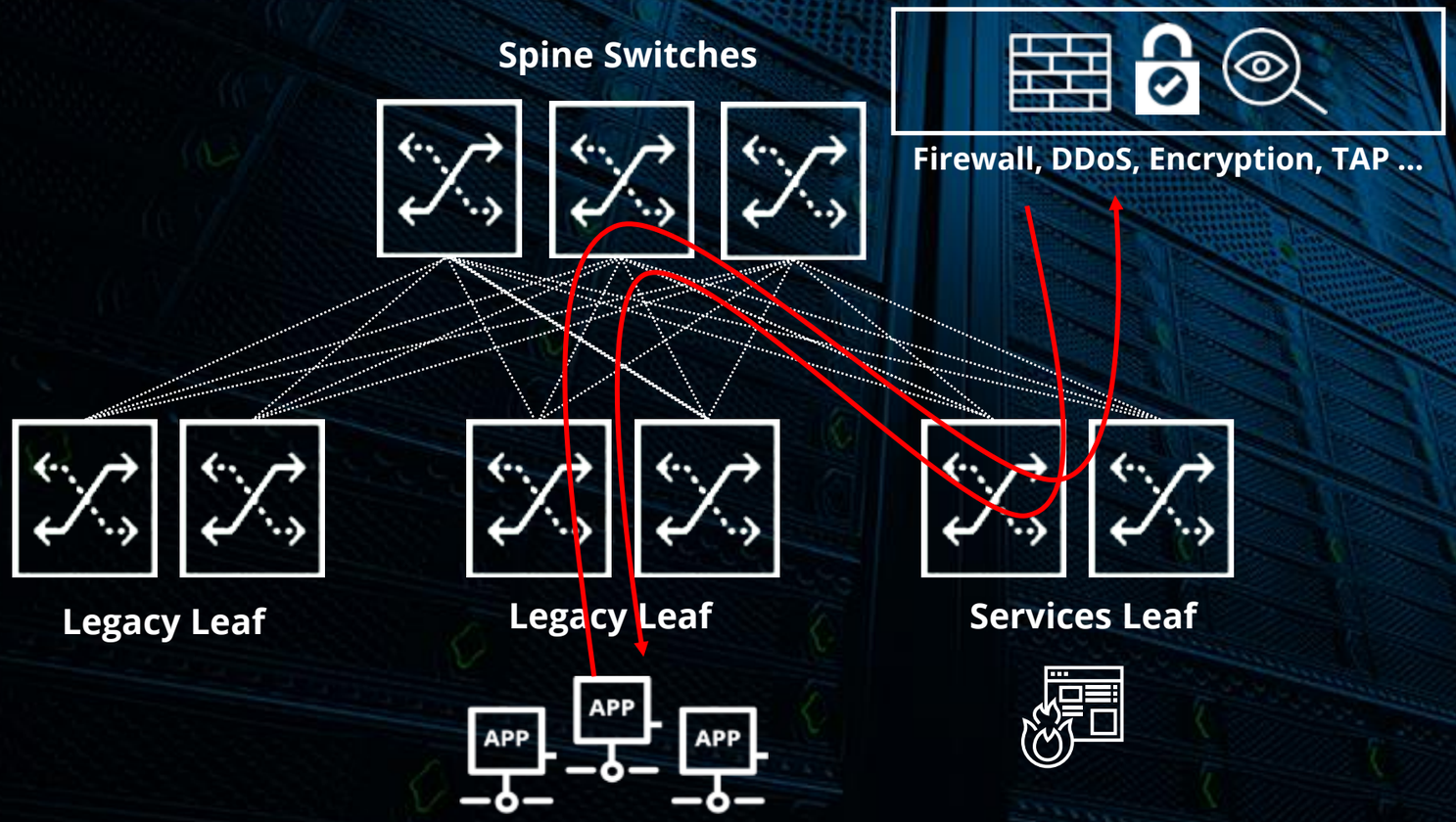
SOON

USB 4G LTE MODEM

PENSANDO

CHALLENGES WITH DC SERVICES TODAY

TROMBONING TO SERVICES APPLIANCE CLUSTERS



Appliances become bottlenecks for east-west traffic

Impacts application latency, performance, compliance

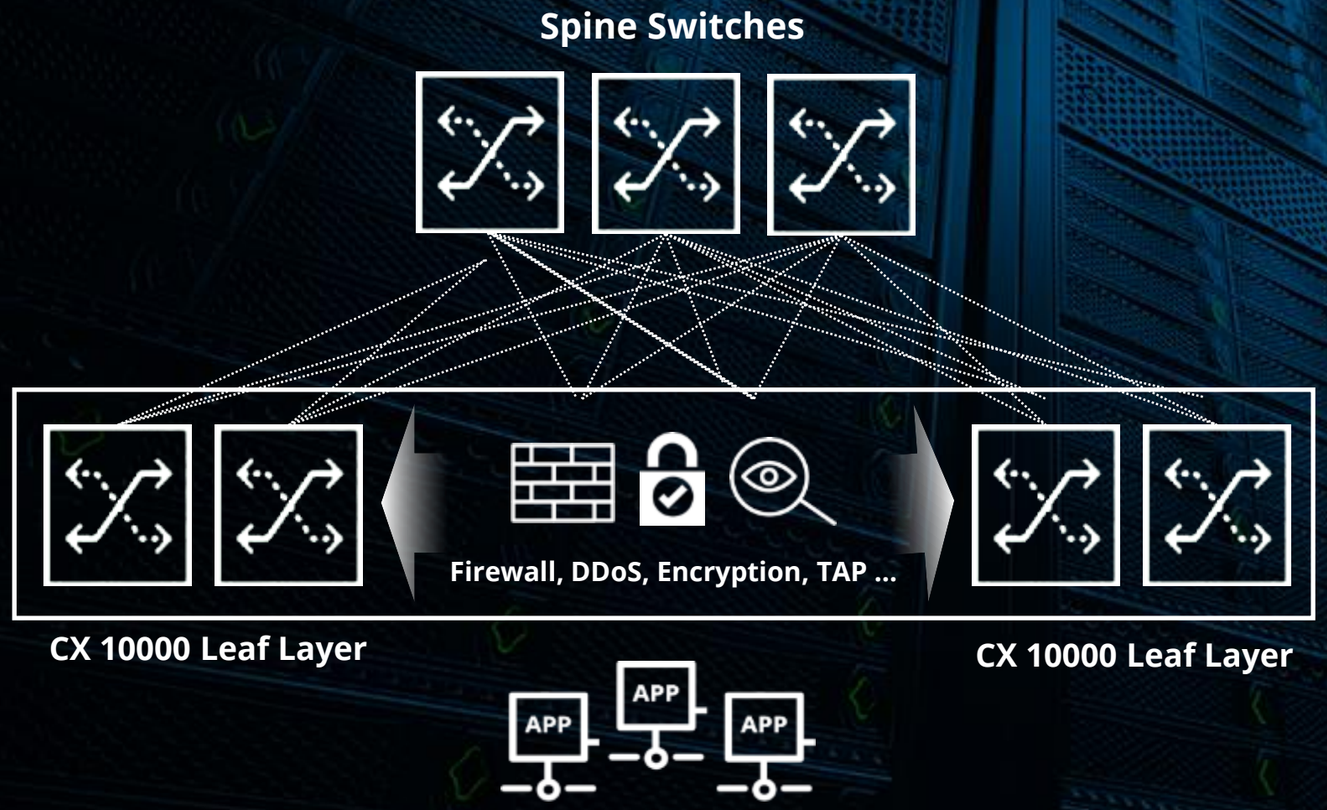
Increases complexity and cost

(Appliance sprawl, licensing)

PENSANDO

WHAT IF THERE WAS A BETTER WAY?

SERVICES DISTRIBUTED ACROSS ALL LEAFS



Services applied closer to applications at scale

Stateful zero-trust, firewalling, DDoS natively embedded for any workload

Reduces appliance sprawl and cost

Future proof architecture – additional functionality enabled on demand

Encryption, Stateful NAT, Load-balancing

PENSANDO

A NEW SWITCHING CATEGORY:
DISTRIBUTED SERVICES SWITCH

ARUBA CX 10000

L4-L7 Stateful Software Services

FIREWALL | DDoS | TELEMETRY | ENCRYPTION* | NAT* | SLB*

Industry first smartswitch for the enterprise

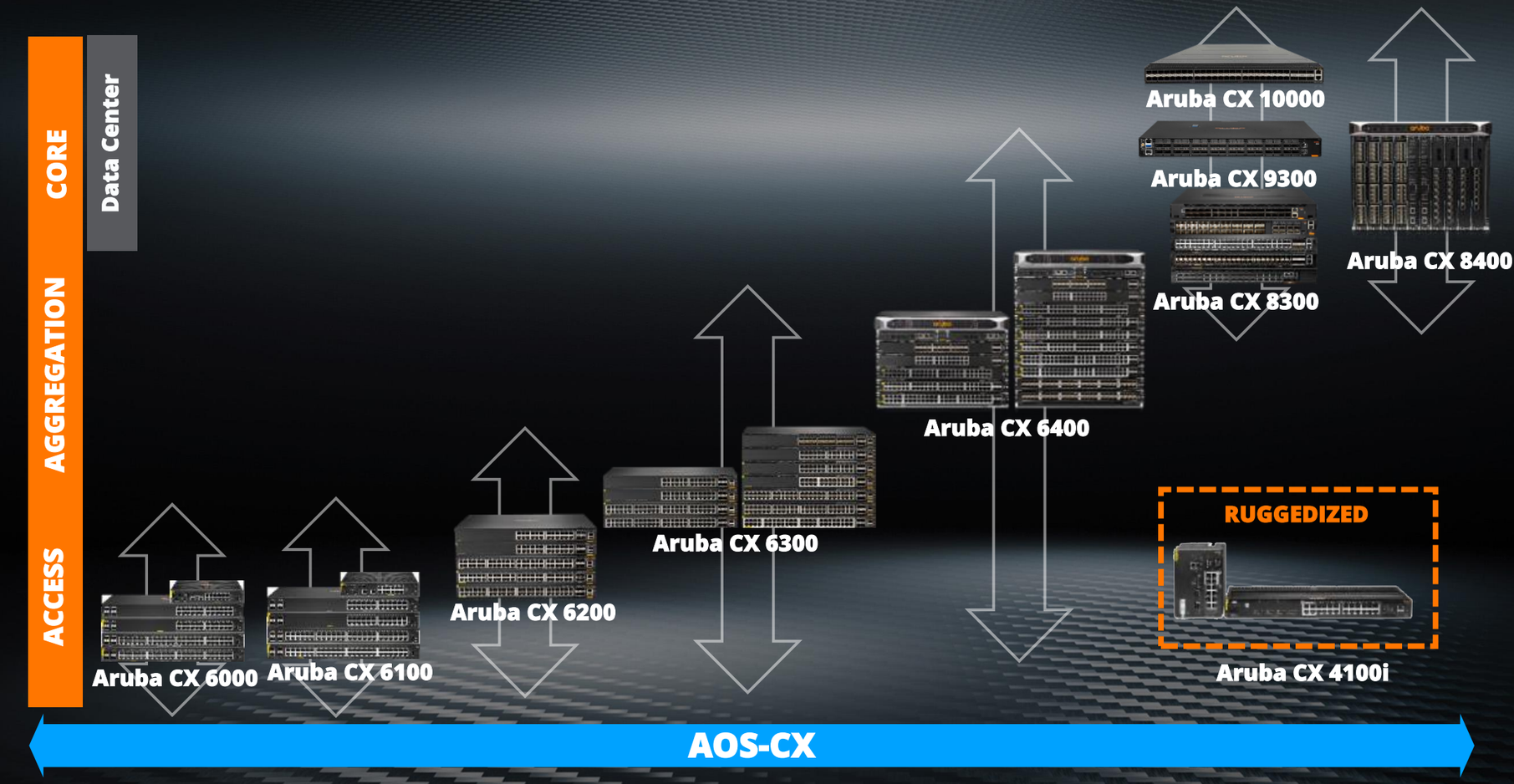
Embedded Pensando DPU's and extensible services built into the fabric

Aruba AOS-CX and Orchestration (AFC)

10X PERFORMANCE, 100X SCALE AT 1/3 TCO

*Roadmap for software enablement

ARUBA CX SWITCHING PORTFOLIO
SINGLE OS FROM SMB TO CAMPUS TO CORE



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EDGE-TO-CLOUD SECURITY

PROTECT

Effectively Addressing Risk

92%

Critical risks Addressed by Segmentation

67%

Devices with risk Reduced by Segmentation

Most Effective Action For Critical Risk

- E-W Segmentation 64.77%
- Update Firmware 18.02%
- Service Hardening 7.42%
- Change Credentials 6.70%
- N-S Segmentation 2.46%
- Incident Response 0.47%
- Configuration Change 0.16%

NETCONDUCTOR EVOLUTION OF DYNAMIC SEGMENTATION WITH CHOICE OF OVERLAYS

CENTRALIZED OVERLAY ENFORCEMENT

Enforcement Done At Gateway

ClearPass Policy Enforcement Firewall

new

DISTRIBUTED OVERLAY ENFORCEMENT

e.g. EVPN/VXLAN

Enforcement at Ingress and Egress

Aruba Central NetConductor

INTRODUCING ARUBA CENTRAL NETCONDUCTOR

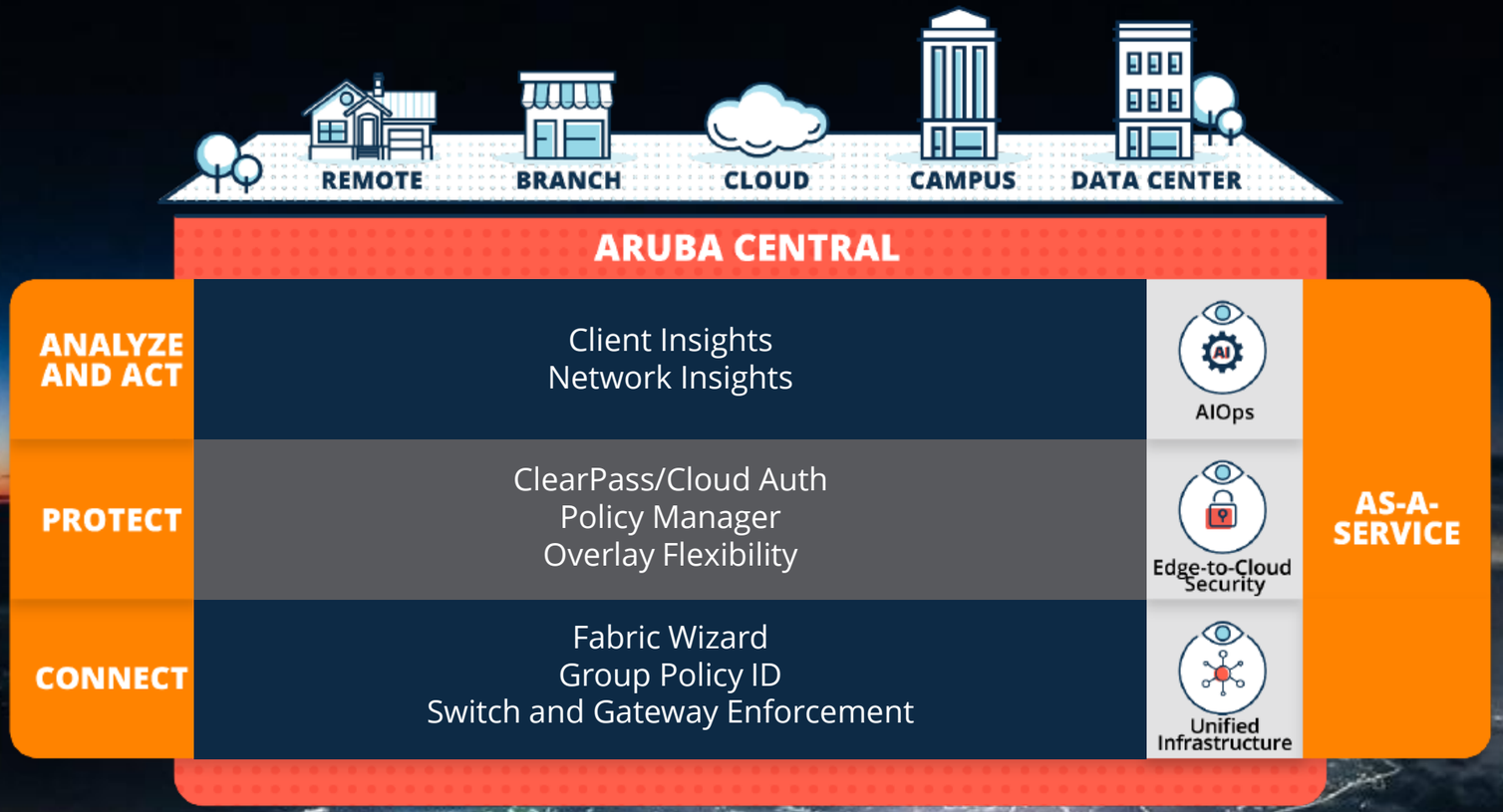
Unified network overlay configuration, traffic and security policies at scale

Intent-based workflows for ease of operation

Automated configuration and policy propagation

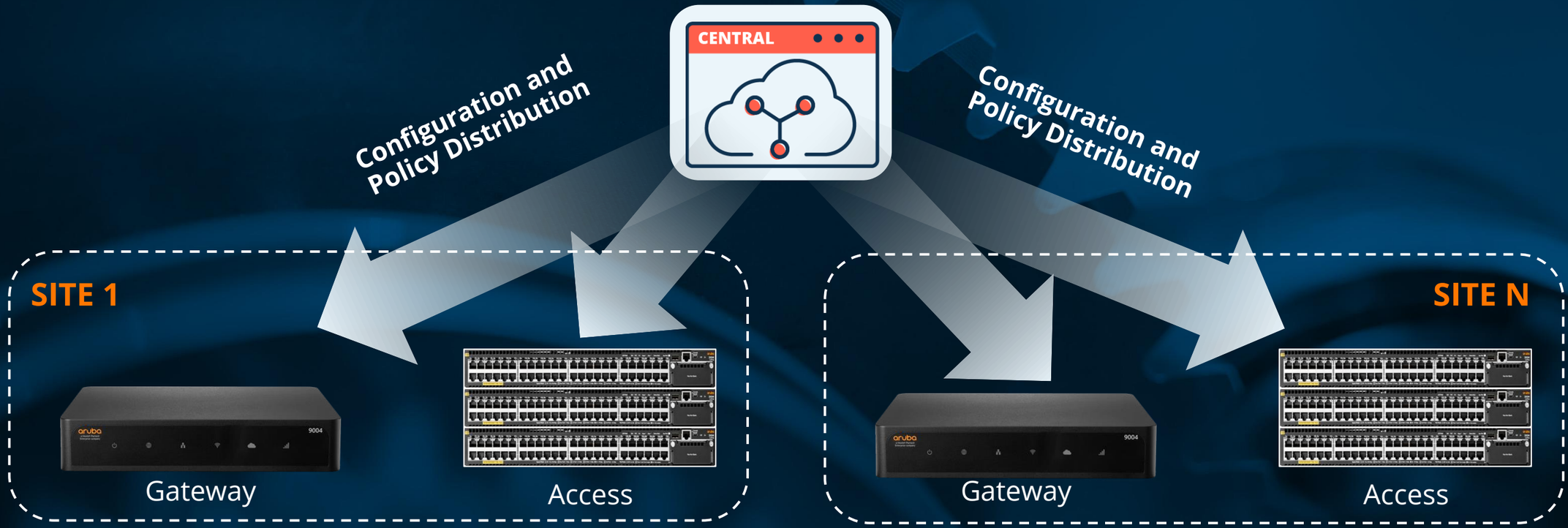
Uses widely adopted protocols for interoperability and ease of adoption

ARUBA CENTRAL NETCONDUCTOR
COMPONENTS



AUTOMATION AT SCALE

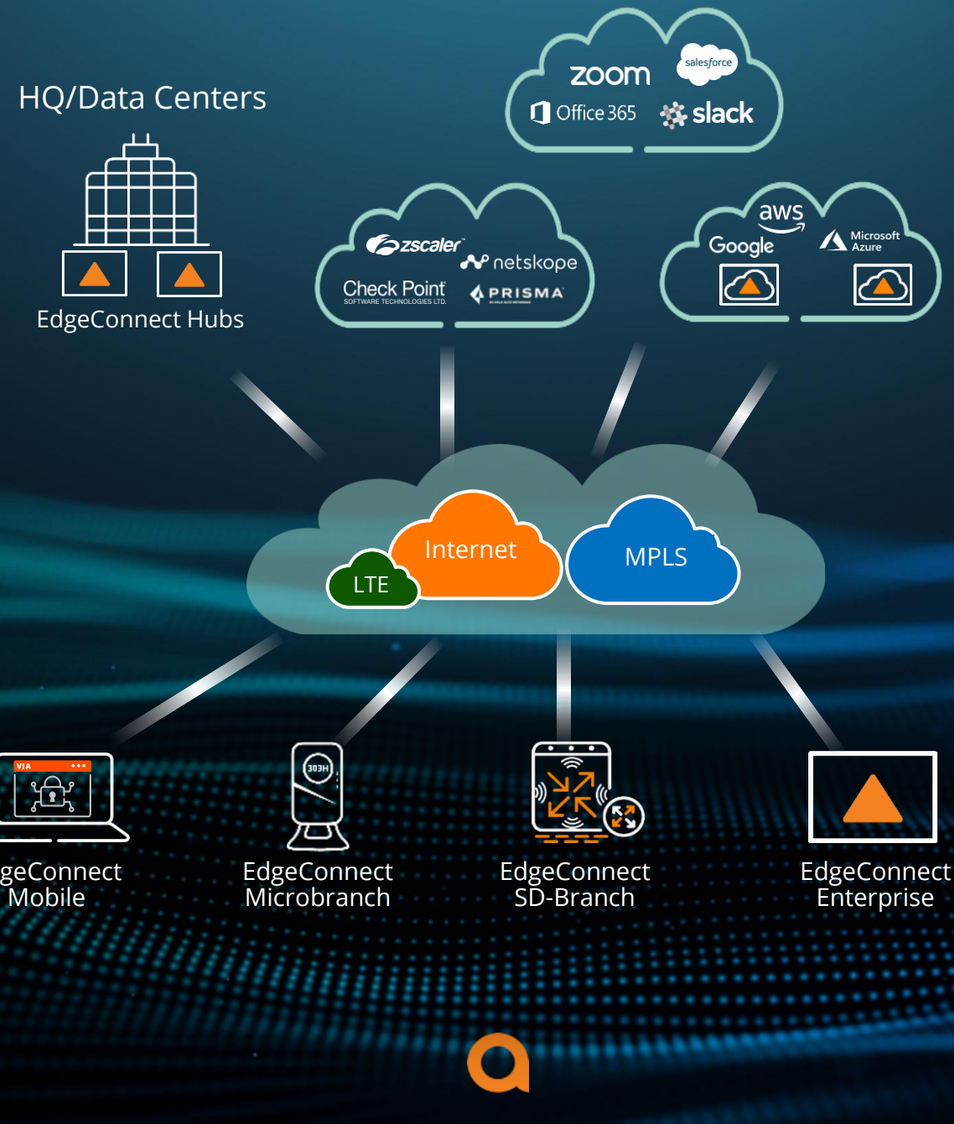
Central NetConductor
Management and Orchestration



MICROBRANCH
HYBRID WORKPLACE SOLUTION

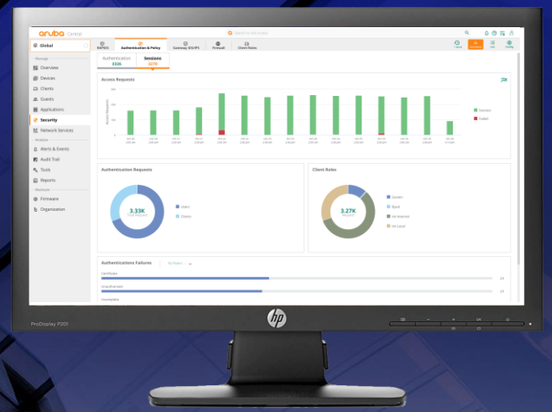
SECURE, IN-OFFICE EXPERIENCE TO EMPLOYEES ANYWHERE

A UNIFIED SD-WAN FABRIC



SOLVING CUSTOMER CHALLENGES
INTRODUCING CLOUD AUTH

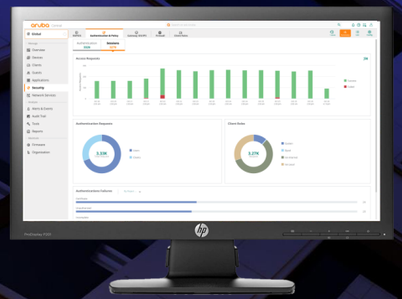
ARUBA CENTRAL



Integrated creation of roles and authentication/authorization workflows.
Built into Aruba Central Cloud for simplicity.
A shift to cloud-managed NAC.

MODERN EDGE TO CLOUD SECURITY

BENEFITS TO IT



Visibility into authentication traffic patterns through dashboards

Authentication validated against cloud identity stores to grant access

Leverages Central Client Insights for accurate profiling and behavior monitoring.

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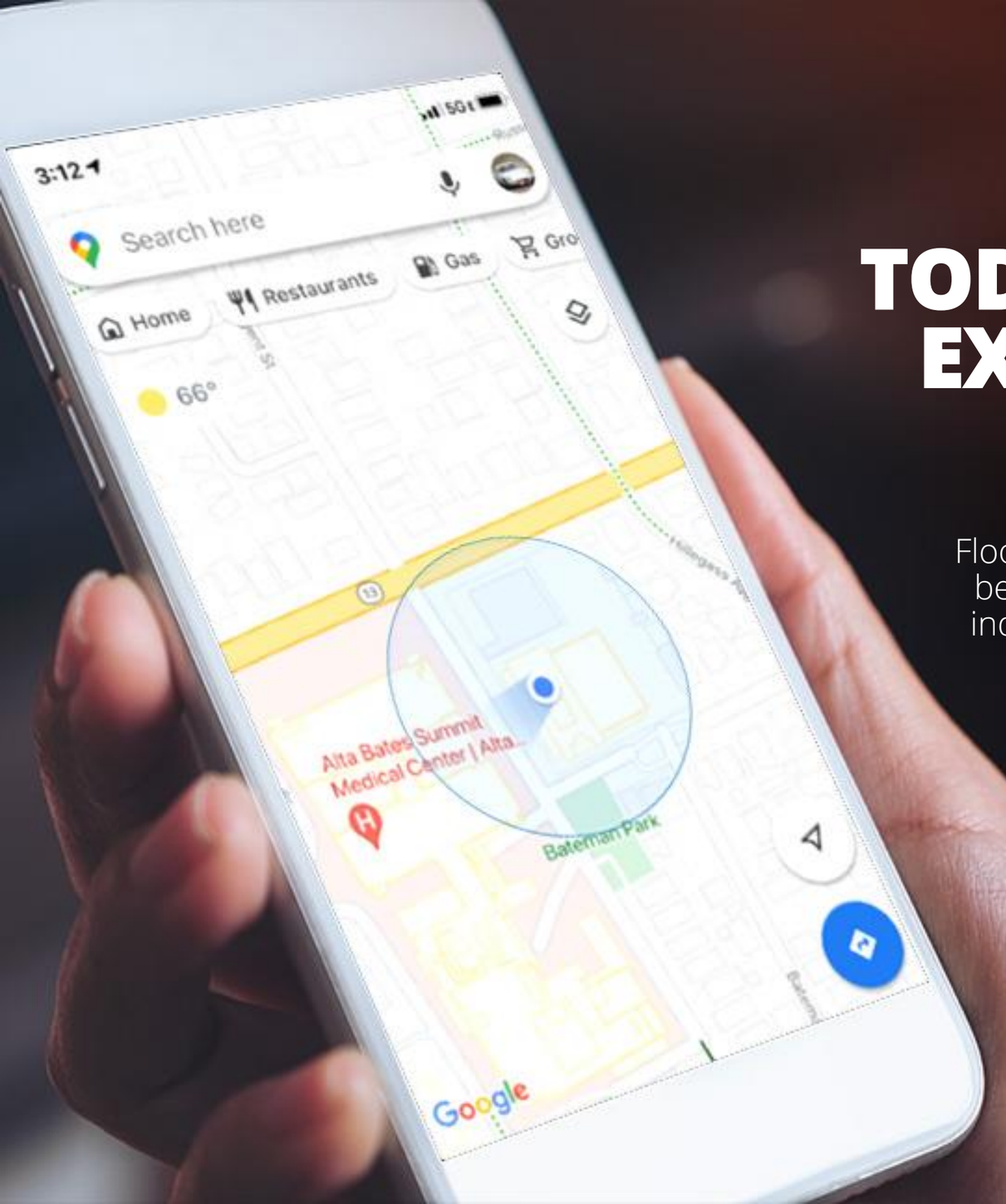
AIOPS

ANALYZE & ACT



TODAY'S INDOOR LOCATION EXPERIENCE IS LACKING...

#1

Floorplans cannot be relied on for indoor accuracy

#2

Traditional Wi-Fi and Bluetooth ranging techniques are poor

#3

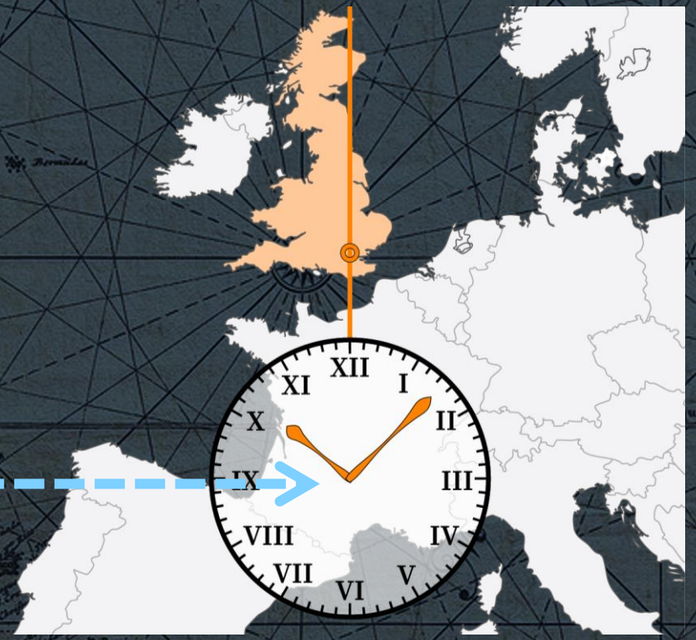
Software requires extensive custom development

DETERMINING A CLIENT DEVICE'S PRECISE LOCATION REQUIRES ABSOLUTE REFERENCE POINTS

LATITUDE

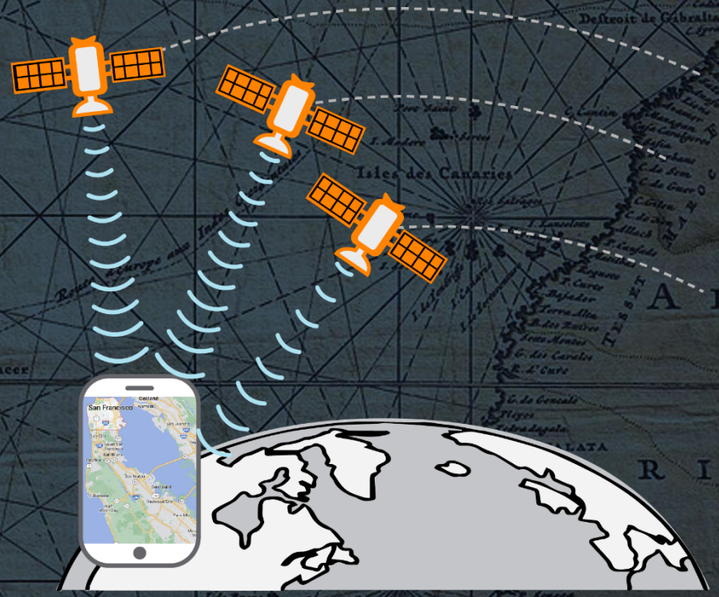
North Star

LONGITUDE



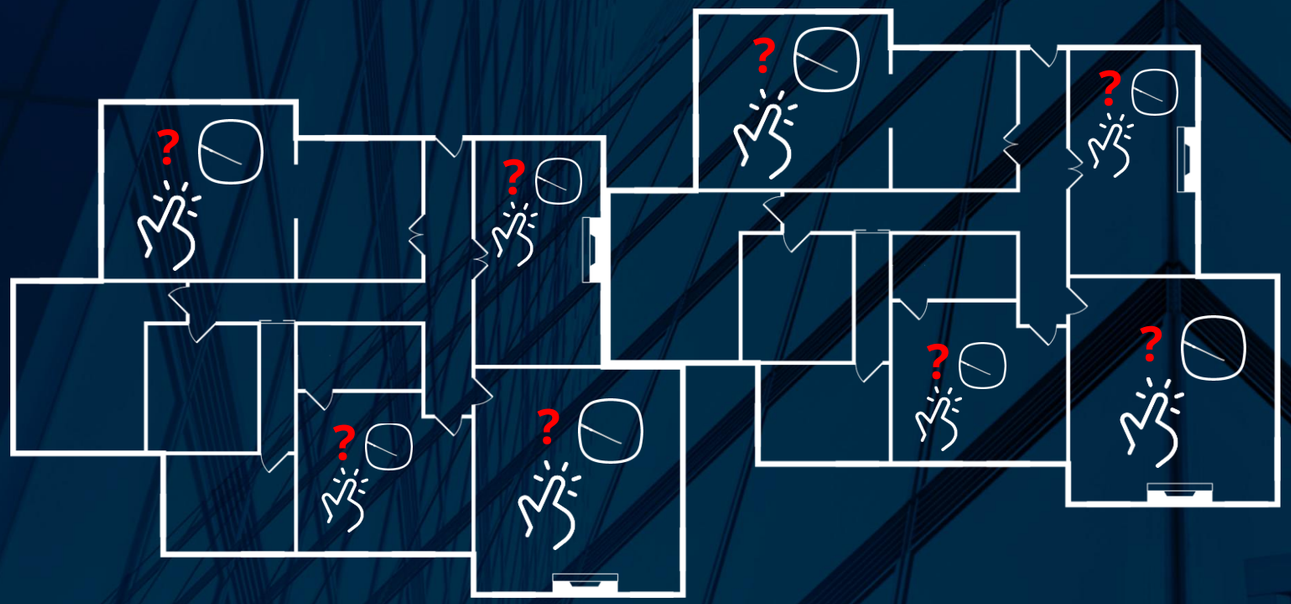
Greenwich Mean Time

SATELLITE NAVIGATION



Orbital Position

WHAT'S WRONG WITH INDOOR APs AS ABSOLUTE REFERENCE POINTS?



80% of Wi-Fi APs are not mapped

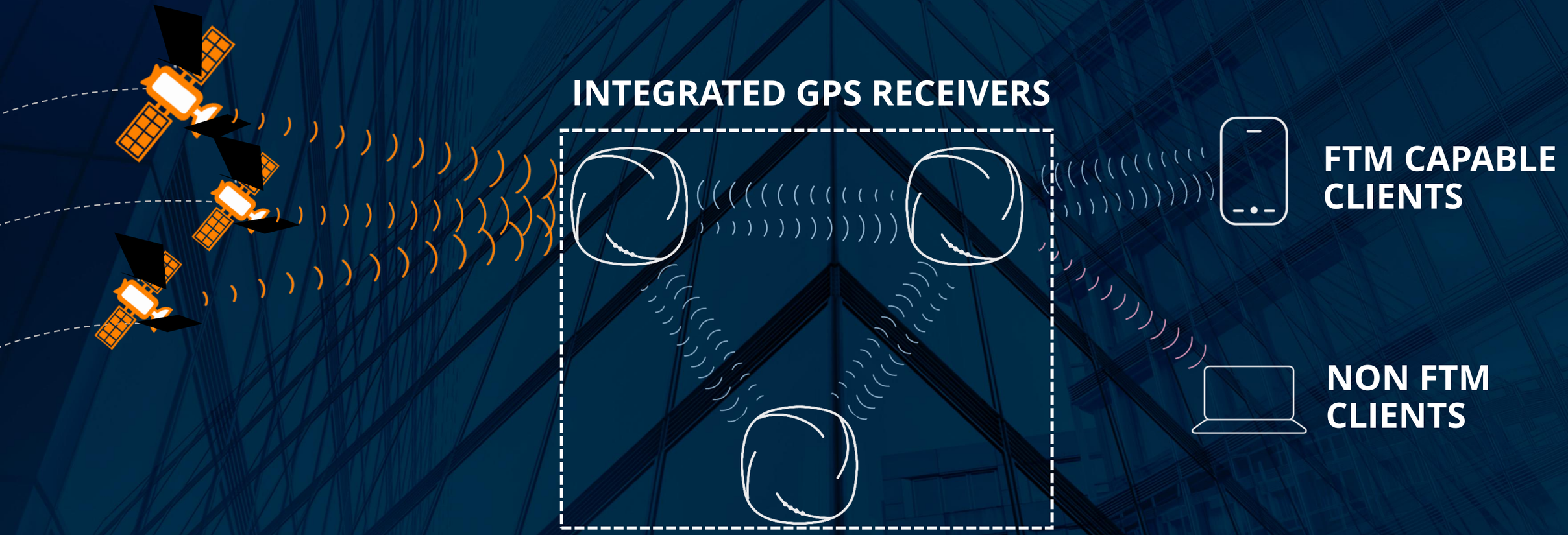
Placement errors of 5-10 meters

Floor plans are 2D-only

Not synced with Google / Apple / Bing Maps

INTRODUCING OPEN LOCATE

WORLD'S FIRST SELF-LOCATING WIRELESS NETWORK



THE ARUBA ADVANTAGE

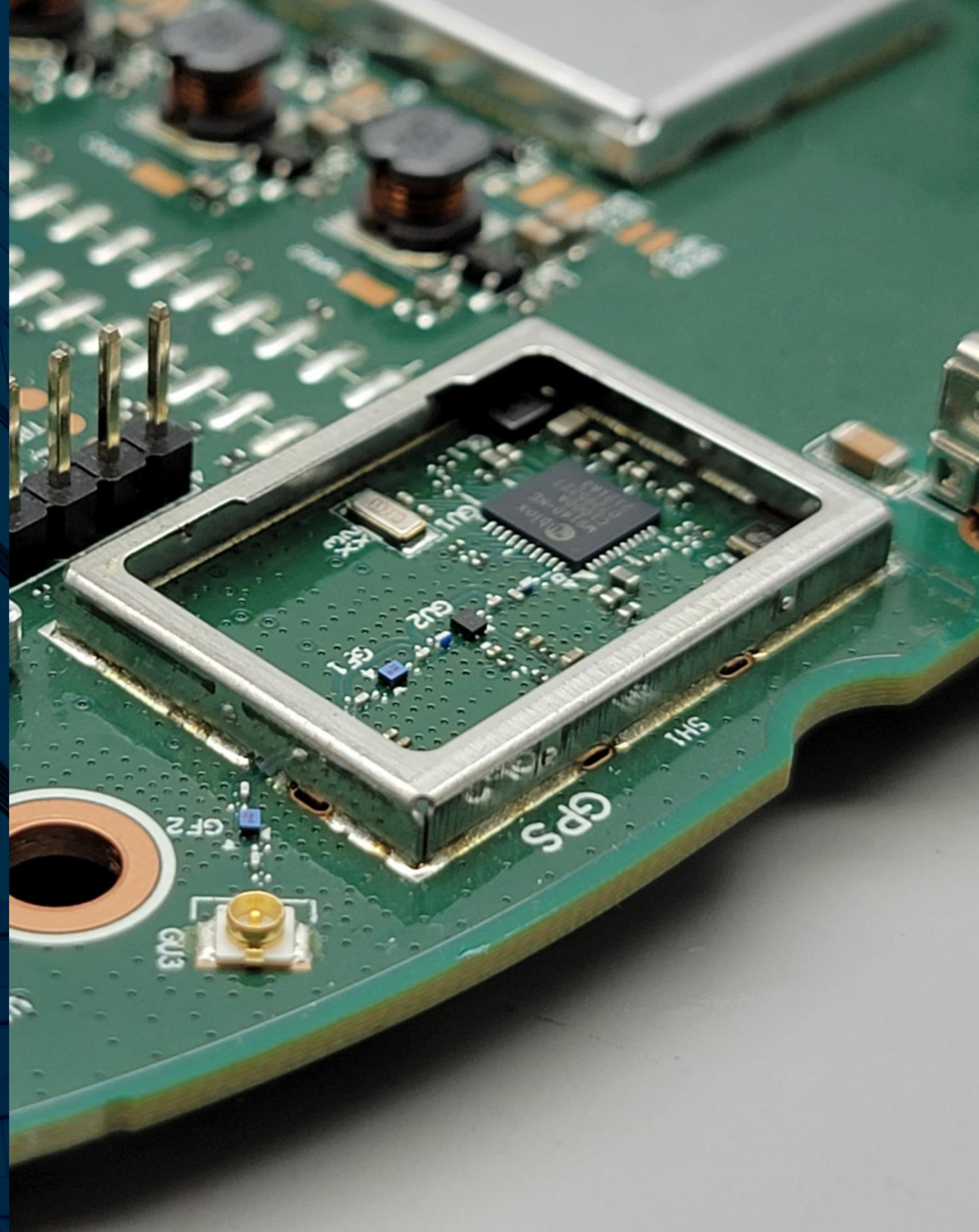
Automatic AP location discovery

Aruba AP interoperability
with Google / Apple / Bing Maps

Enabling developers to use
our location data

Ready for outdoor 6 GHz use*

*pending regulatory approval



OPEN LOCATE-READY ACCESS POINTS
WI-FI 6E AND WI-FI 6 PORTFOLIO

PREPARE FOR DIGITAL ACCELERATION WITH ARUBA WI-FI 6E & WI-FI 6

FINE TIME MEASUREMENT

GPS RECEIVER

650 Series | 630 Series

550 Series

530 Series

510 Series

500 Series

500H Series

Upgrade today to take advantage of advanced location capabilities

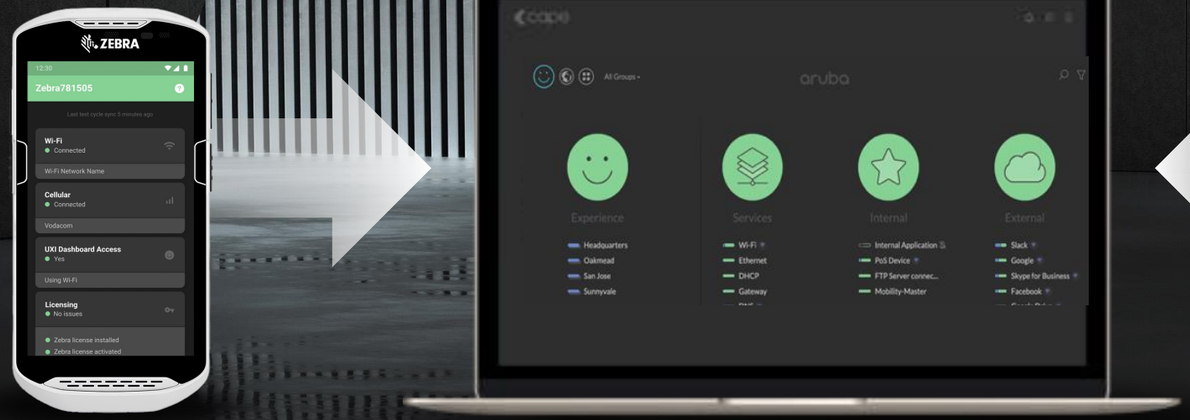
ZEBRA
12:30
Zebra781505
Last test cycle sync 5 minutes ago
Wi-Fi
Connected
Wi-Fi Network Name
Cellular
Connected
Vodacom
UXI Dashboard Access
Yes
Using Wi-Fi
Licensing
No issues
Zebra license installed
Zebra license activated
ZEBRA
UXI AGENT FOR ZEBRA

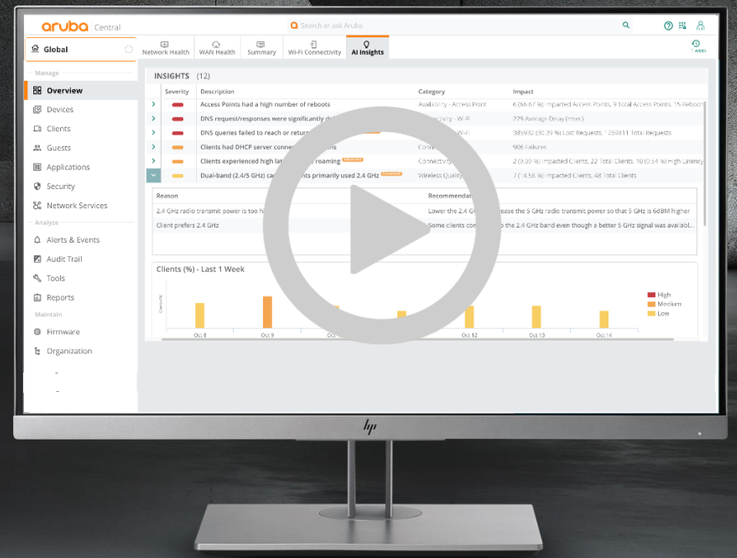
HELPING LoB WITH DIGITAL ACCELERATION PROBLEM RESOLUTION

UXI Agent

User Experience Insight

Aruba Central (Open Locate)





Open Locate data from Aruba Central enhances UXI analytics and assurance

The way forward

HPE has a **unique vantage point** rooted in our own sustainability journey

Commitment to be a net-zero enterprise across our entire value chain by 2040 with near-term goals by 2030

~50%

of renewable electricity sourced in our operations on our way to 100% by 2030[1]

6000+

patents for transformational low-carbon technologies filed since 2000[3]

85%

of tech returned to HPE is upcycled and put back into active use[2]

>500

Social and Environmental Responsibility audits conducted with suppliers

[1]HPE Living Progress Report, 2021
[2]HPE Financial Services Technology Renewal Center information
[3] Based on HPE internal records
[4] 2021 Living Progress Data Summary, 2022

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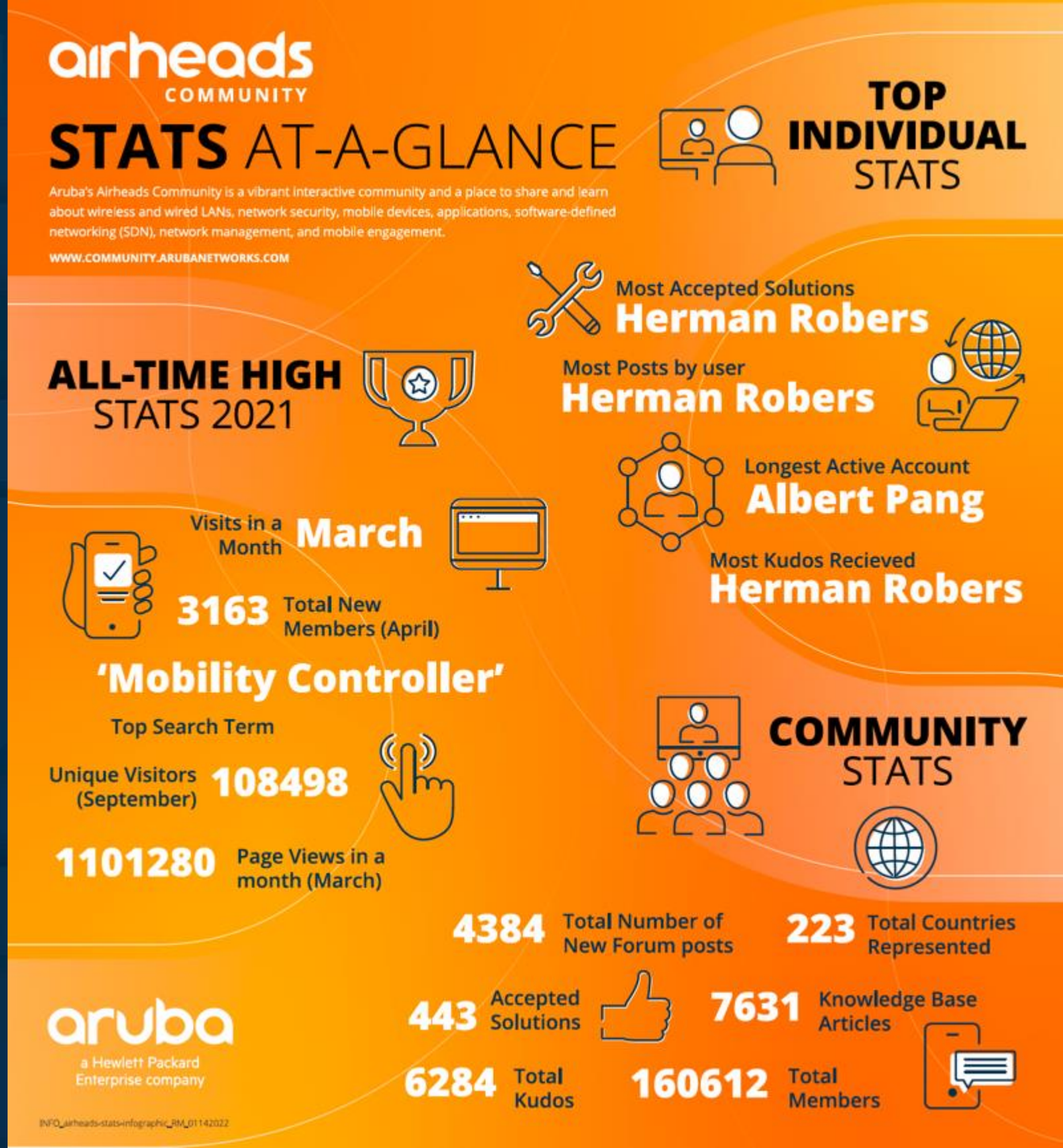
CONGRATS TO OUR AIRHEADS COMMUNITY MEMBERS

Community for:

Customers/Partners/Employees/Influencers
160K+ members
1101k page visits
442 accepted solutions
Average response time approx. 18 min

Become a member at:
LINK



airheads COMMUNITY

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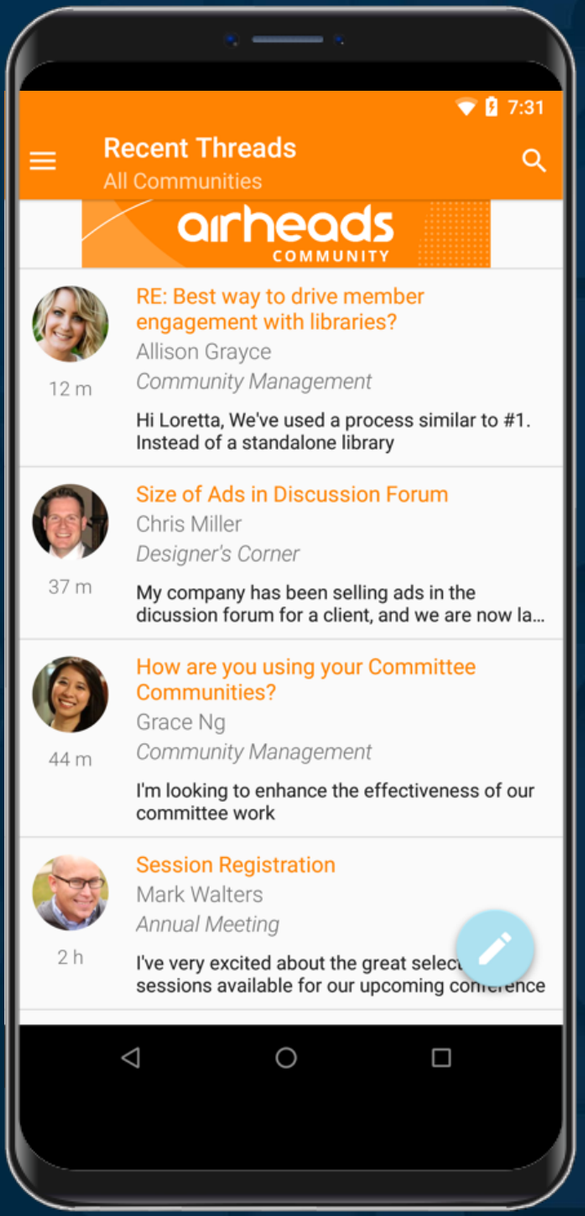
www.community.arubanetworks.com



ARUBA '22
BALTIC DAY

Thank you

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