

May 2020

User Experience Insight

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SOLUTION ADVOCACY APJ

aruba
a Hewlett Packard
Enterprise company



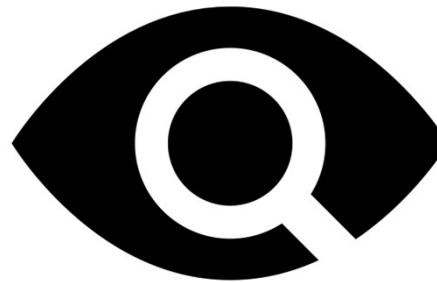
Key Challenges

Typical IT Solutions Do Not Focus on Mobility, SaaS, or User Experience

Many issues go undetected until end-users complain



Many issues are transient, anecdotal, or difficult to replicate

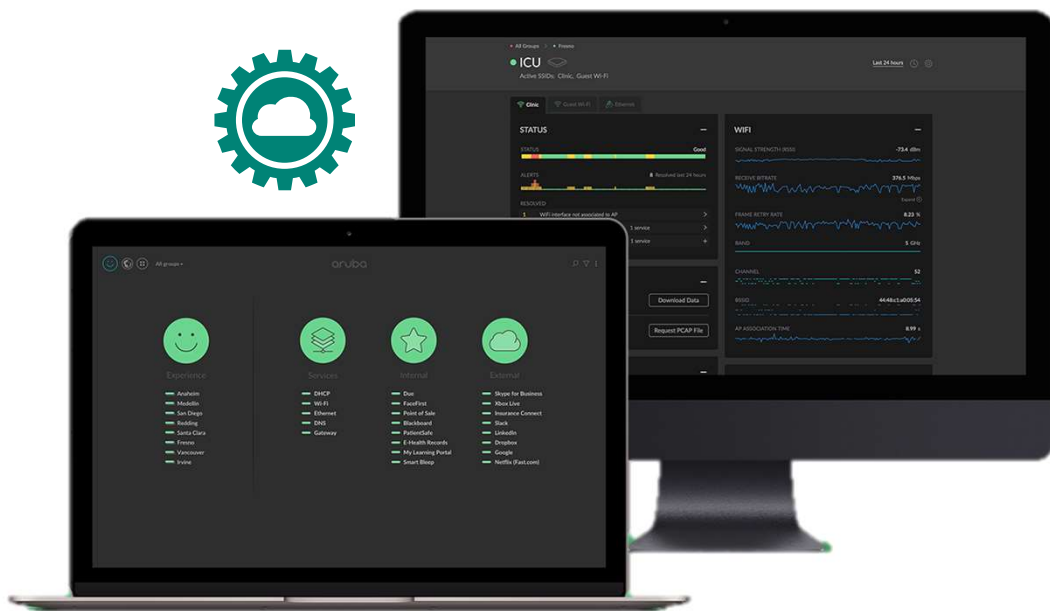


Existing tools may be ineffective, and lack end-user awareness



Introducing Aruba User Experience Insight

Cloud-Based UI



User and Application Assurance

Gain a user's perspective of the network and application performance by mimicking user behavior and actions

AI Alerts for troubleshooting

Use machine learning and synthetic testing for proactive validation of network health

Simple to manage and deploy

Intuitive user interface for administration, real-time monitoring, and zero-touch provisioning

WLAN, LAN, and App Assurance

Collect data from APs, switches, internal services, and cloud-based applications



IT Assistant and Assurance Best Practices In A Box

- ✓ **Continuous Automated Testing and Troubleshooting**
- ✓ **At-A-Glance Status**
- ✓ **Actionable Insights**



- ✓ **Fix and Validate Remotely**
- ✓ **Peace of Mind Everything is OK**
- ✓ **Save Time (And Money)**



Actionable Insights Enable Consistent User Experiences

User-perspective **insights** for detecting and troubleshooting problems in ways no other solution can provide, without site-visits or truck-rolls.

UNIQUE

- The only vendor with synthetic client testing
- Provide an outside-in perspective of the network
- Vendor-agnostic with support for any Wi-Fi SSID or wired port

POWERFUL

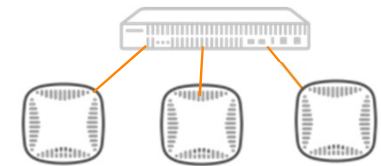
- Offers real-time performance status
- Enables proactive problem resolution
- Tests the full path from the edge to data/app/service
- Triage feature plus packet capture history and analytics facilitates troubleshooting

SIMPLE

- Straightforward value prop
- Works with any network, including non-Aruba and mixed-vendor
- Easy to demo and quote
- Intuitive user interface
- Zero-touch installation
- Minimal ongoing admin



An End-to-End Perspective



Aruba Central Cloud Management for WLAN, LAN, VPN and SD-WAN

User Experience Insight

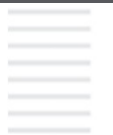
Use:
Continuous testing and validation with automated troubleshooting and AI Alerts to understand user experience

Leverages Data from:
Purpose-Built UXI Sensors and integrates with Aruba Central

Aruba Central

Use:
AI/ML-based Wi-Fi Optimization

Leverages Data from:
Aruba UXI, WLAN, LAN, and SD-WAN

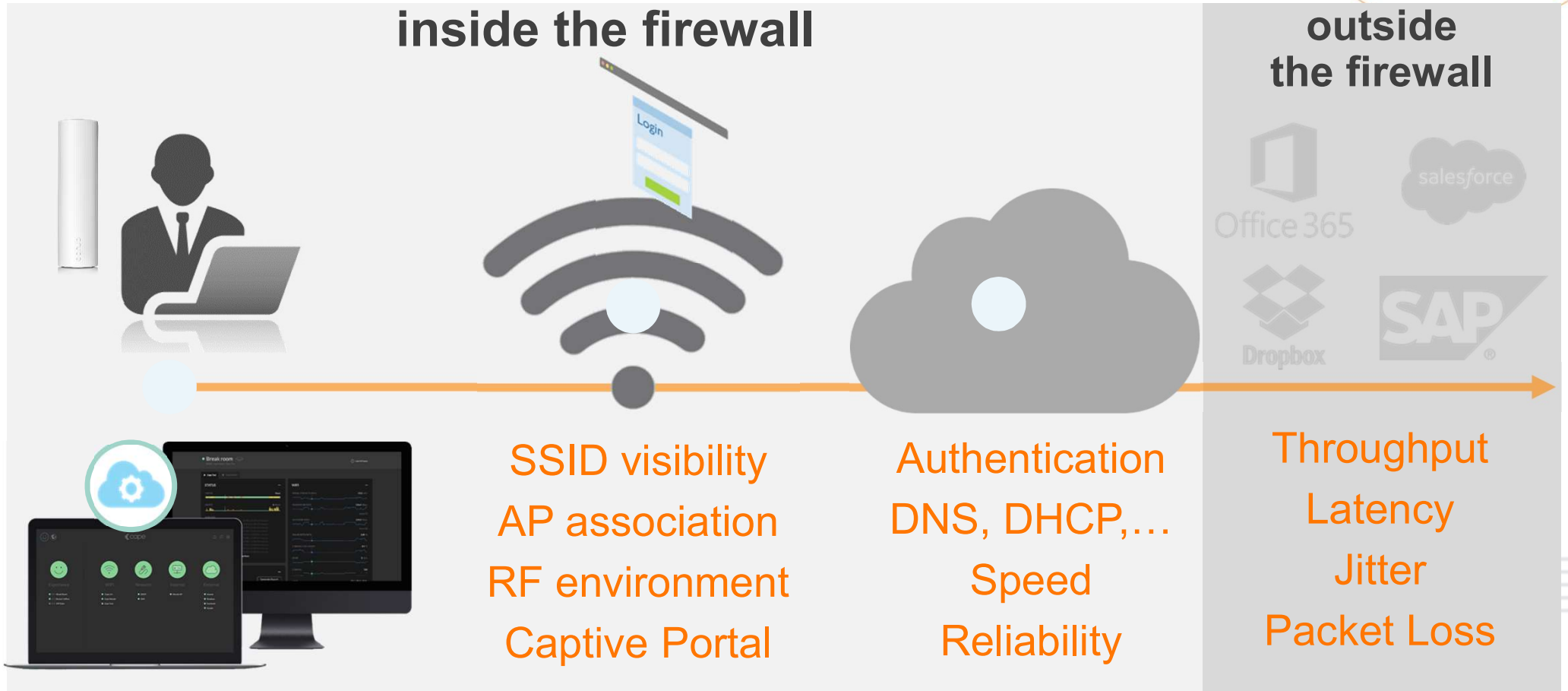




User Experience Insight

Features and User Interface

Data to Optimal User Experiences



Test Suite

Thorough Testing **To** and **Through** Your Network

Wi-Fi

- Scan
- Association
- Packet capture
- Measure KPIs (RSSI, Util, etc.)

Network

- Authentication
- Captive Portal
- Gateway
- DNS
- DHCP
- Iperf3
- Ping/Hping
- HTTPGet / Curl
- Telnet

Library of Apps:

- Test any Web Application (easy recording/script)
- Office 365, Gmail, AWS (w customer login)
- Dropbox (w customer login)
- Slack (w customer login)
- Skype for Business, Blue jeans and other VoIP services
- Netflix
- YouTube



Zero-Touch Deployment Is As Easy As 1, 2, 3

In the office, branch, or remote location



UXI G-Series
Sensor



UXI F-Series
Sensor

1

Place or mount

1 sensor for every 5-10 Aps
at end-user locations

2

Connect to power

AC adapter or PoE

3

Login to dashboard

View real-time status



UXI Sensor Portfolio

Synthetic client devices that analyze and test the network



**UXI G-Series
Sensor**



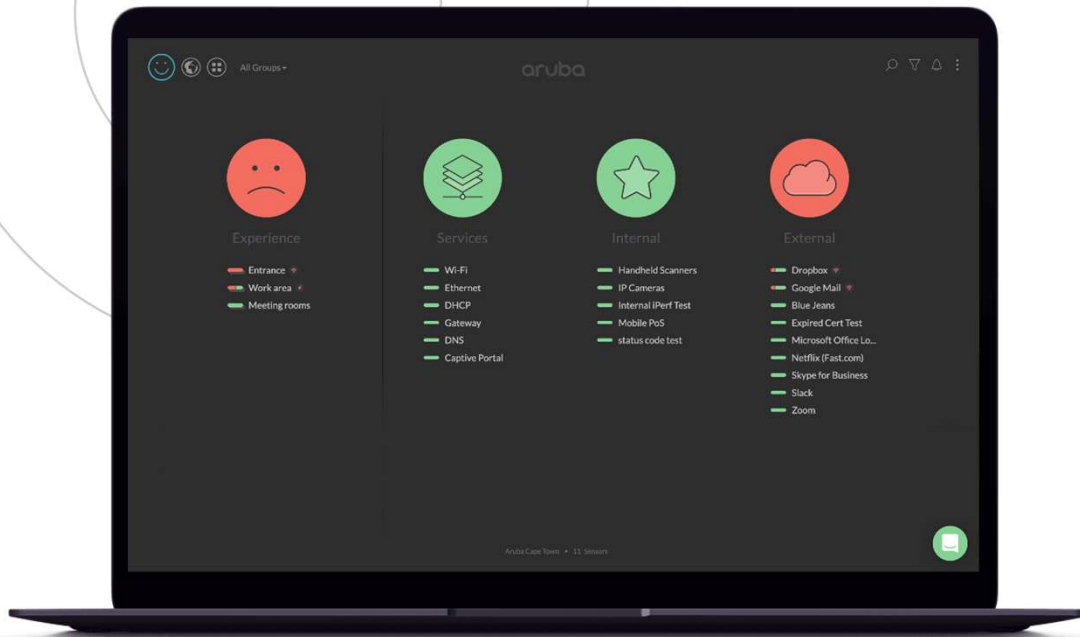
**UXI F-Series
Sensor**

G-Series	F-Series
2.4/5GHz 2x2 Wi-Fi 5	2.4/5GHz 2x2 Wi-Fi 5
10/100/1000 GE	10/100/1000 GE
Bluetooth 5	N/A
Optimized for wall mount (or ceilings)	Optimized for ceiling mount (or walls)
1, 3, 5-year cloud or LTE license	1, 3, 5-year cloud or LTE license
Optional Mobile app onboarding via BLE	N/A
Kensington lock	N/A
1-year limited warranty	90-day limited warranty

- Ship to any country and plug into power and it will self-configure. No technical person needed on site.
- Supports out of band connectivity



At-A-Glance Status



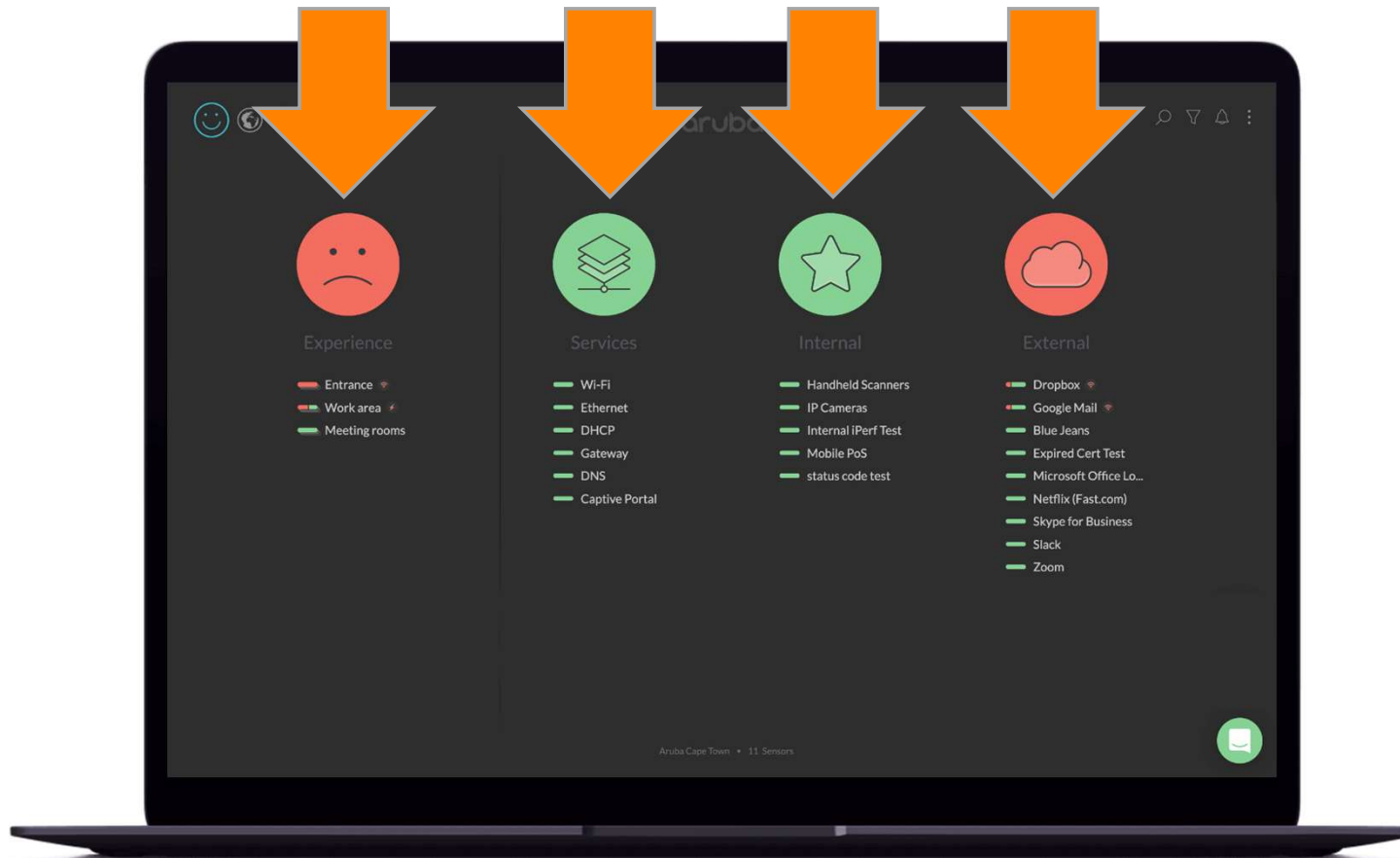
Performance is OK



There's an issue

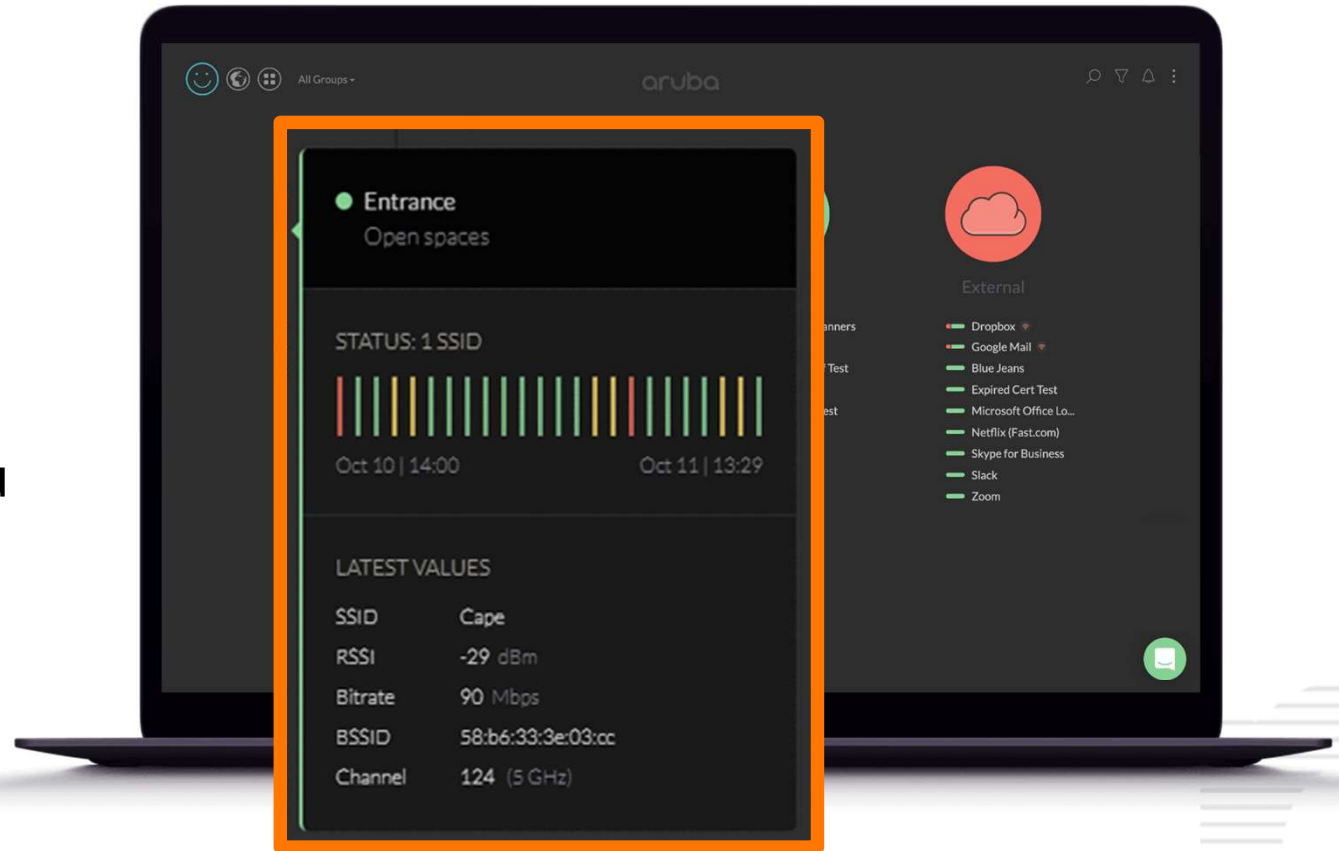


Intuitive Real-Time Status



Bring Insights to Any Location

Quickly identify location-specific issues at each site, building, floor, or aisle by installing sensors where you need them most

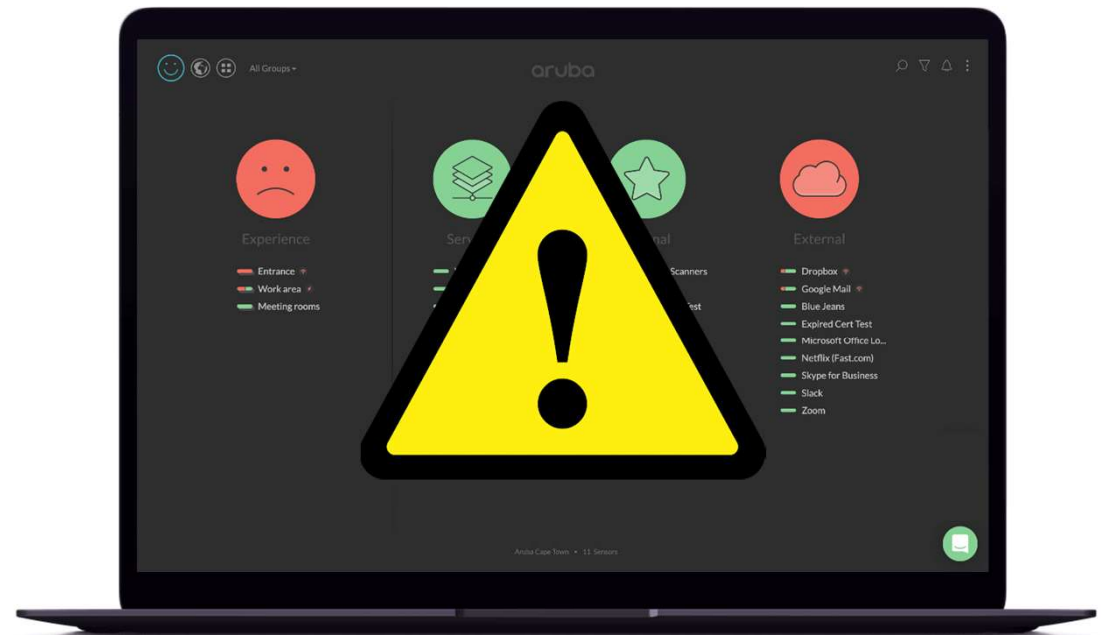


AI Alerts

Available soon

Surface critical problems using machine learning that require immediate IT attention.

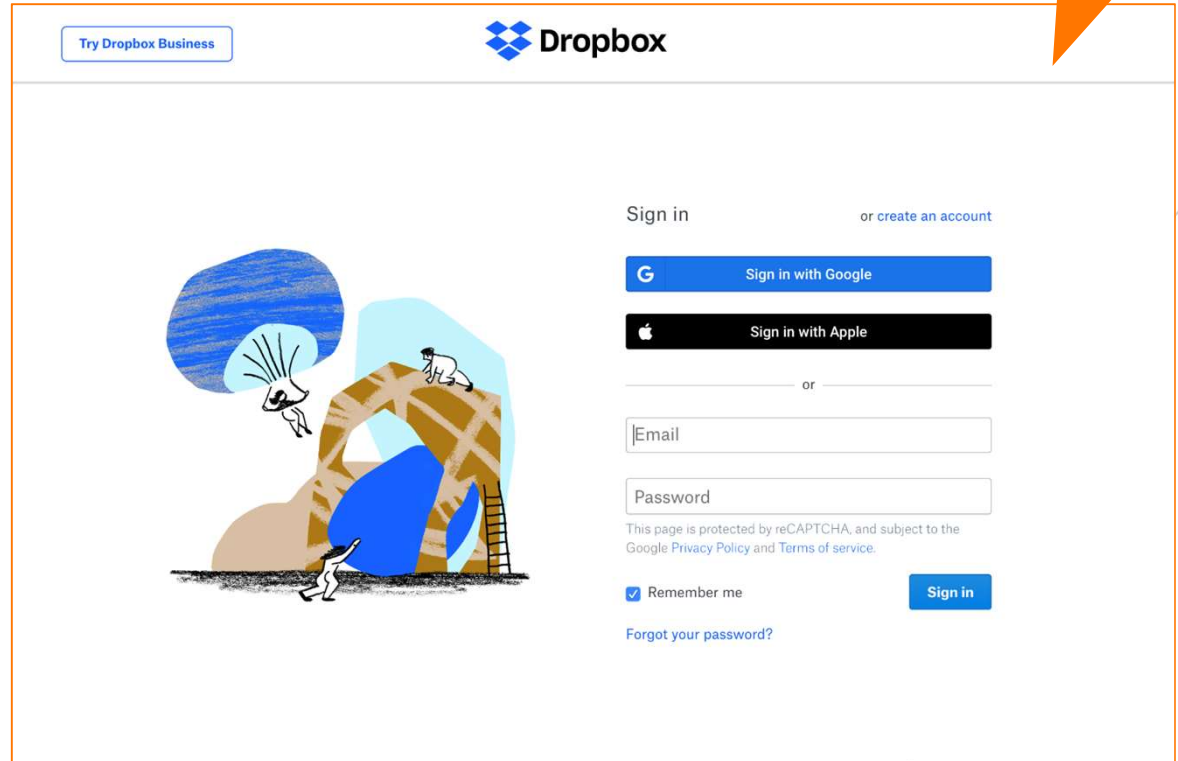
Alerts can trigger events to ServiceNow and Slack



Enhanced Application Testing



Dropbox Personalized Testing:
Automatically login to Dropbox using APIs, and test the upload and download health of the service



Enhanced Application Testing

Web Application Testing:

Record and conduct custom web application tests using sensors across every site in the network

Web App Testing



Record web interaction
Playback on sensors 24/7

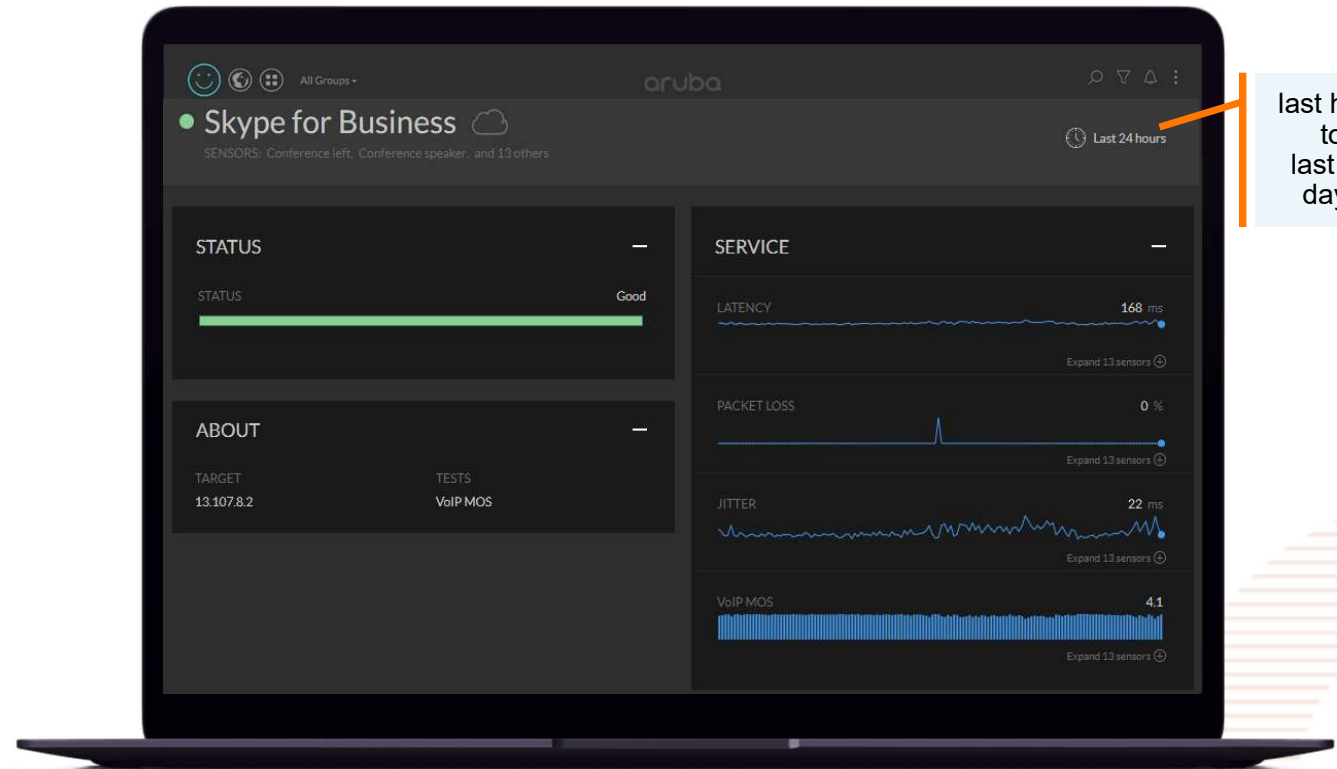
Available soon



Service Quality Insights

Go back in time to address or validate performance issues of cloud and UCC services using:

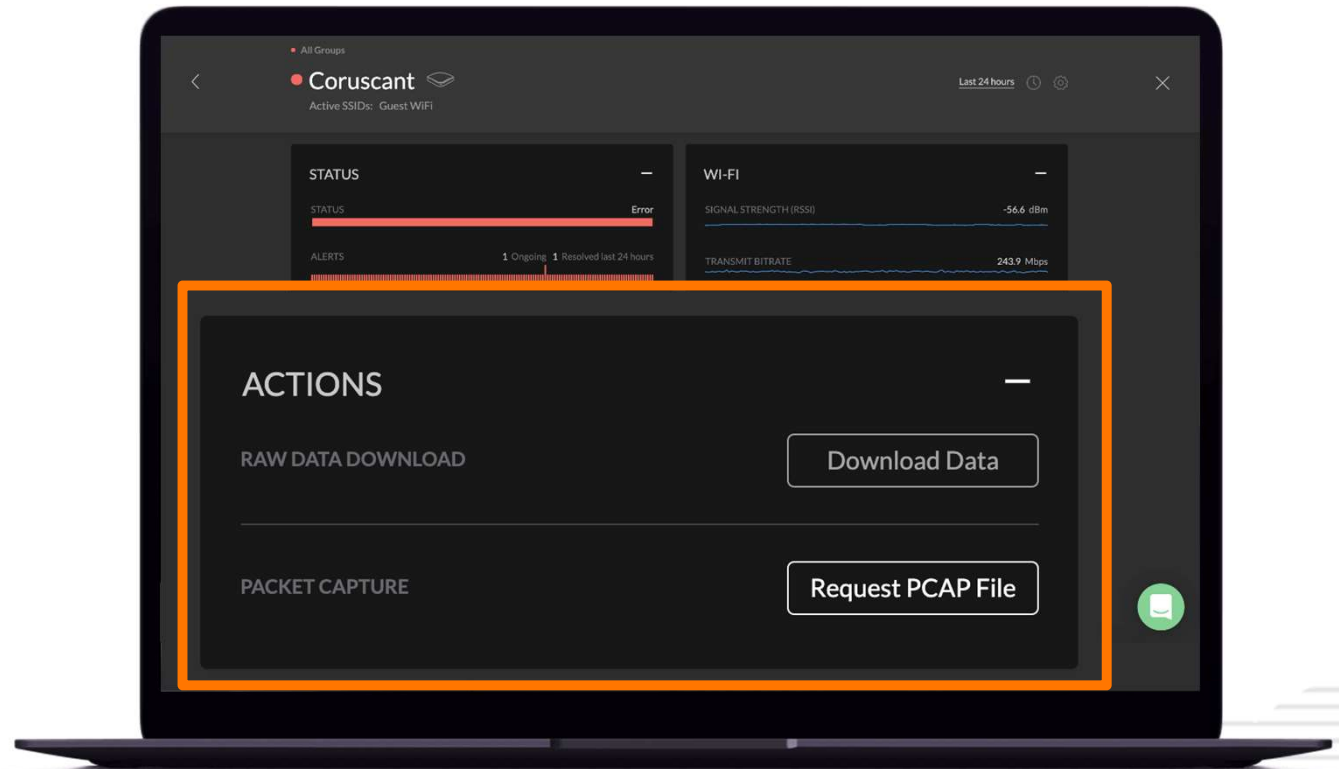
- Downloadable root cause analysis
- Dynamic packet captures



last hour
to
last 30
days

Dynamic Packet Capture (DPCAP)

Packet captures are dynamically uploaded when issues are detected – or run on-demand



Automatic Troubleshooting

Fast **remote** troubleshooting with rich diagnostics

The screenshot shows a Windows Network Troubleshooter window titled "Internal service is unavailable". It displays a "Resolved" status with a timestamp of "04:04 to 04:04 (a few seconds)", SSID "Guest WiFi 5GH", and sensor "Desks 1 - window". Below this is a "Test" section for "chrome.google.com" on port 80. The main "Analysis" section is a table with columns: INTERFACE, SECONDS, STATUS, MESSAGE, TASK, TARGET, and an expand/collapse icon. The table is divided into two sections: WiFi and Ethernet. The WiFi section shows a "Service is unavailable" error at 9.4 seconds, which is highlighted in red. The Ethernet section shows a "High packet loss to host" error at 13.2 seconds. A legend at the bottom indicates: ROOT CAUSE: ⚠️, GOOD: ✓, ERROR: ✖️, INFO: ⓘ, WARNING: ⚠️.

INTERFACE	SECONDS	STATUS	MESSAGE	TASK	TARGET	
WiFi	0.0	✓	WiFi is associated	WiFi association		—
	0.2	ⓘ	Detailed DHCP lease information	DHCP lease		+
	0.2	✓	Gateway is reachable	Gateway	10.12.6.1	+
	2.3	✓	Nameserver is operating normally	Service on default DNS		+
	3.7	✓	Successfully connected to an external host	External connectivity		
	3.7	⚠️	No response from host	Host, ICMP Ping	chrome.google.com	+
	7.1	✓	Host is responding to pings	Host, TCP Ping port 80	chrome.google.com	+
	9.4	⚠️	Service is unavailable	Test errors		
Ethernet	9.4	✓	Ethernet is connected and up	Interface status		+
	9.5	ⓘ	Detailed DHCP lease information	DHCP lease		+
	9.5	✓	Gateway is reachable	Gateway	10.12.4.1	+
	11.6	✓	Nameserver is operating normally	Service on default DNS		+
	13.2	✓	Successfully connected to an external host	External connectivity		
	13.2	✖️	High packet loss to host	Host, ICMP Ping	chrome.google.com	+
	16.6	✓	Host is responding to pings	Host, TCP Ping port 80	chrome.google.com	+

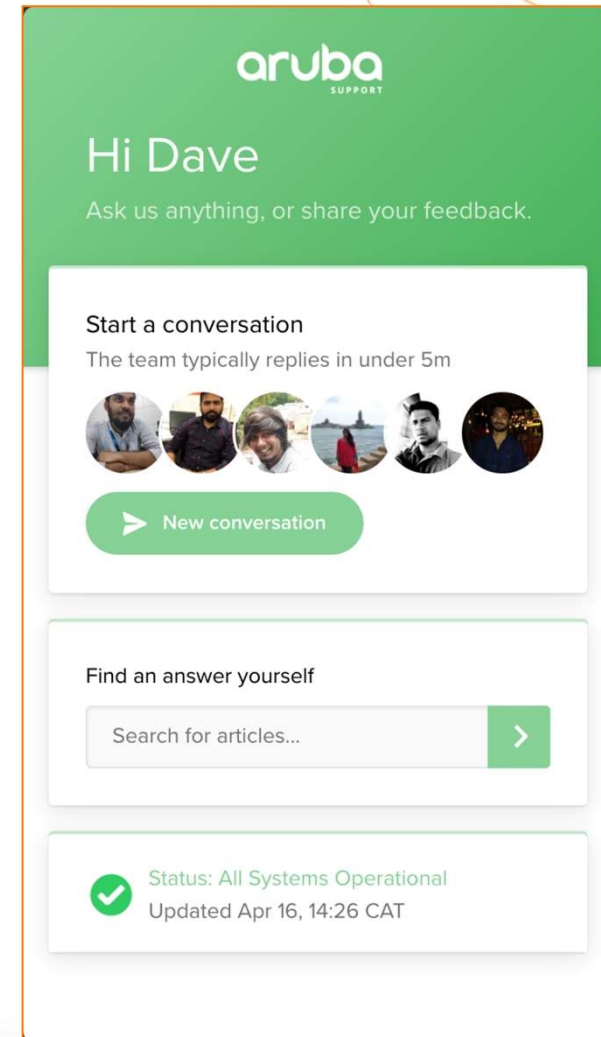
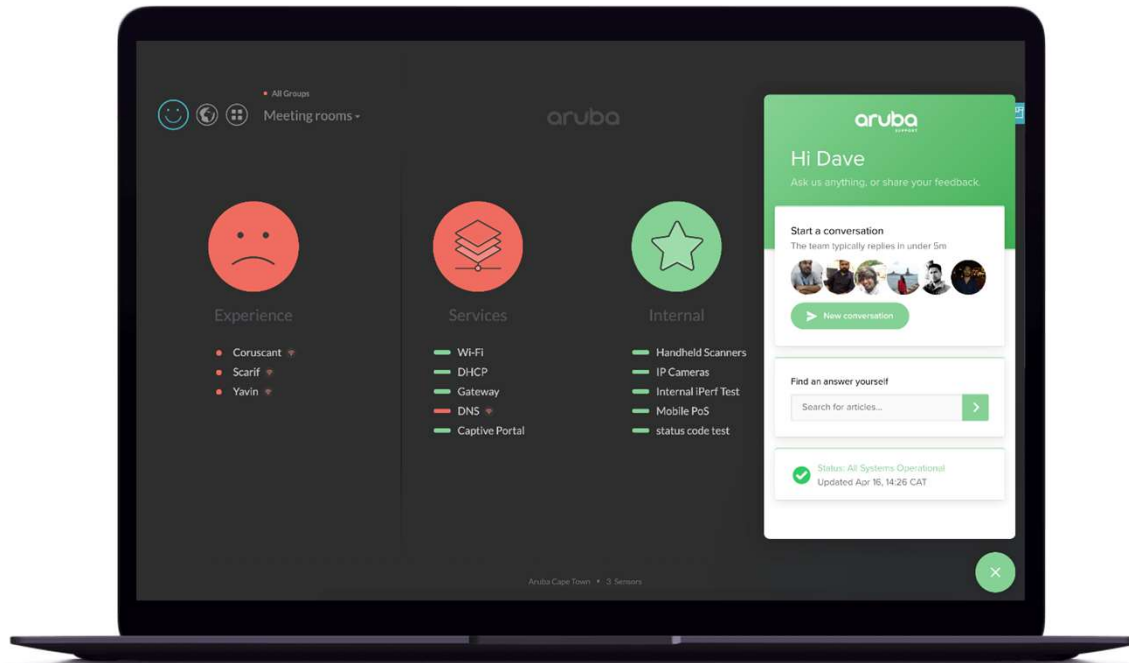
easily identify root cause



24/7 Live Chat

Need help?

Aruba support is available on your dashboard

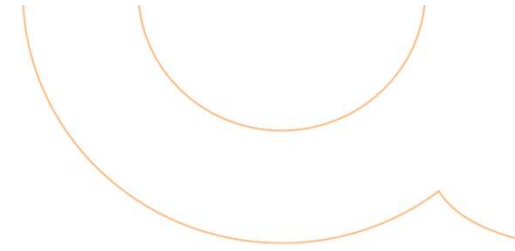




User Experience Insight

Environment Applicability

Assure user experience in any environment



Smart Digital Workplaces

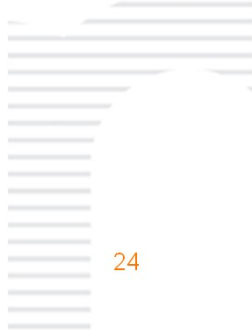
Retail Stores

Large Public Venues

Work From Home

Manufacturing

Education



Success Example: Multi-Vendor Assurance



Objective: assure great connectivity experiences in multi-vendor network

- Real-time tournament info, leaderboard
- Facilitate event app with a new *fan-cam* feature
- Access to email, social media, streaming, etc.

Results:

1. Identified and resolved improperly configured APs by continuously running captive portal tests.
2. Resolved issue with slow event website page loads.
3. Enabled work-around to avert performance degradation from improperly configured short guard interval rates & DNS latency.
4. Helped debug APs that were sporadically stopping DHCP due to Cisco bug.



Summary

- Improve user and application experience on your network through continuous testing and proactive alerting
- Reduce time to resolution, improve business efficiency, save time and money
- Simplify IT team's job, increase credibility (mean time to innocence) and job satisfaction
 - Great for **validating** applications, infrastructure, configuration changes
 - Automatic **troubleshooting** and **root cause analysis**
 - Minimizes site-visits and truck-rolls
 - **Vendor and infrastructure neutral**
 - **Simplicity:** Immediate time-to-value; low ongoing administration



Resources



- [Solution Overview](#)
- [Data Sheet](#)
- **Contact us to arrange a FREE TRIAL**





Thank you

www.arubanetworks.com

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