



Welcome to the RUCKUS One Partner Event

Thursday 6th July, 2023

Agenda for the day

11:00am	Welcome
11:15am	What's next and an overview from Big Dogs
11:45am	Deep Dive into RUCKUS One
12:30pm	Lunch and further demos in demo area
01:30pm	RUCKUS Analytics & Demo
02:15pm	RUCKUS IoT & Demo
03:00pm	RUCKUS ICX and Wan Gateway
03:45pm	Closing presentation
03:50pm	Tea, coffee, refreshments and networking
04:30pm	Event close



Watch the case study video here:

https://www.youtube.com/watch?v=737FesN_wEO

What's next and an overview from Big Dogs

Rob Everett, UK & I Country Manager

RUCKUS



Rob Everett

UK&I Country Manager

Who is RUCKUS



Who is RUCKUS?

We build and deliver
purpose-driven networks
that perform in the
world's most challenging
environments



Who is RUCKUS?

With our partners, we
empower customers to
deliver a differentiated
level of connectivity
and rock-solid user
experiences



What sets **RUCKUS** apart?

An unbeaten track record
of working better than
anyone else in the
challenging environments
of the industries and
organizations we serve

What sets **RUCKUS** apart?

No one else:

- Makes it easier for users to connect and stay connected
- Has the capabilities of the RUCKUS technology stack
- Offers a more resilient and adaptive network

Hospitality



Education



Government



Large Venues



Multi-family



Manufacturing
& Logistics



When “good enough” networking just isn’t,
the world’s most-demanding organizations
turn to RUCKUS

RUCKUS Technology Leadership



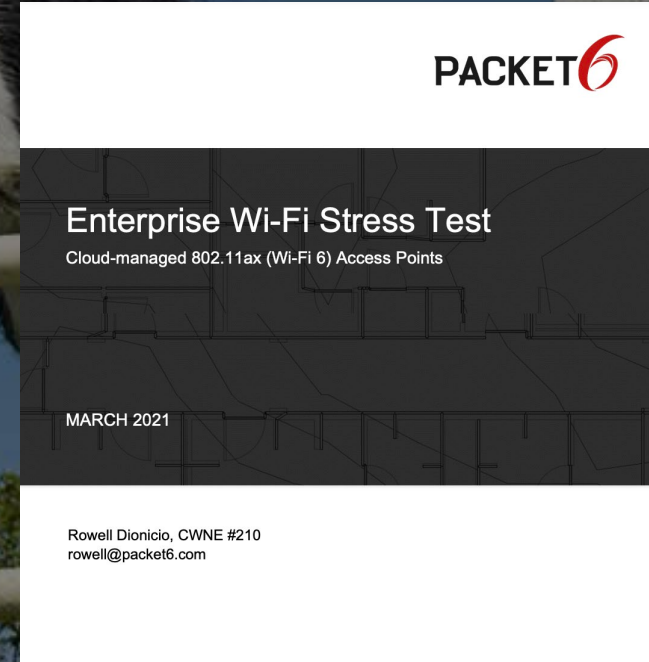
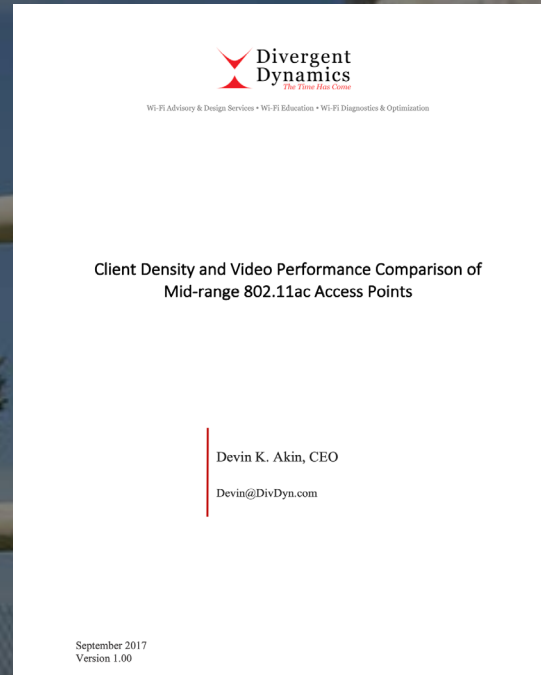
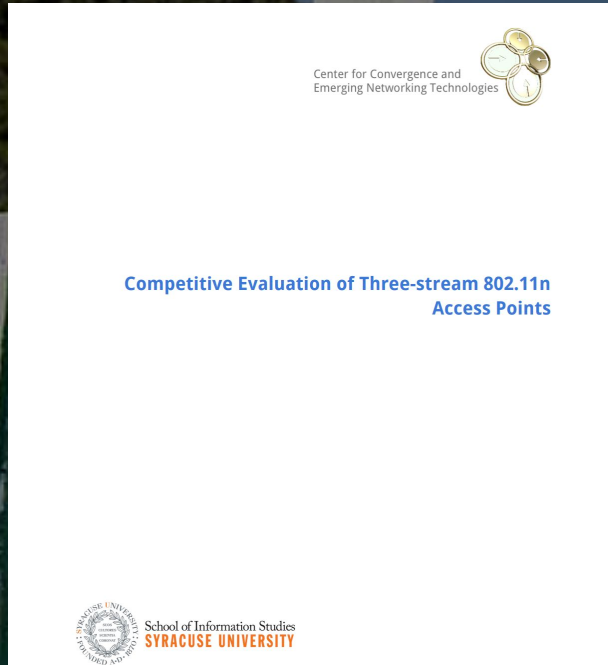
Unbeatable performance

Zero Trust Enterprise

AI

Convergence

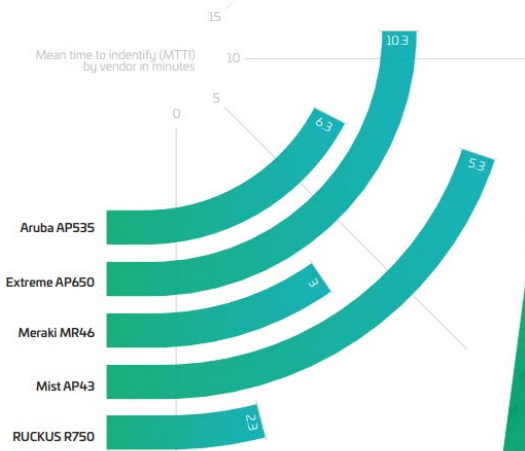
We Raise the Bar!



RUCKUS AI Beat Them All!

Lowest Mean Time to Identification

Troubleshooting with network analytics tools



Mean time to identify

Mean time to identify (MTTI) is the time a network administrator needs to determine the root cause of a network issue or incident. A shorter average MTTI reduces the troubleshooting burden on IT while improving user experience by allowing IT to more effectively limit incident duration and impact.

- **67%** Reduction in mean time to resolution
- **40%** Reduction in time prioritizing & triaging
- **20%** Fewer helpdesk tickets
- **60%** Savings of SME IT time
- **50%** Reduction in new IT hire training
- **80%** Reduction in customer churn



Our vision



A close-up photograph of a chameleon, likely a panther chameleon, perched on a green, textured branch. The chameleon's body is covered in vibrant, multi-colored scales in shades of red, orange, yellow, green, and blue. Its large, prominent eye is visible, and its long, curled tail is at the bottom. The background is solid black. A semi-transparent grey horizontal band is overlaid across the middle of the image, containing the text "Adaptive Resilience" in orange.

Adaptive Resilience

Purpose-Driven Network

- Firewall & SD-WAN
- ZTE and Micro-segmentation
- Network-as-a-Service (NaaS)
- Private LTE/5G networks
- Unified software for cloud / hybrid / on-prem
- Solve real problems, e.g., IoT, DPSK in MDU
- Edge applications and App stores
- Self-healing Networks

Best end user experience

Maximizing business outcomes





AI-Powered Purpose-Driven Network

Thought Leadership

Performance Leadership

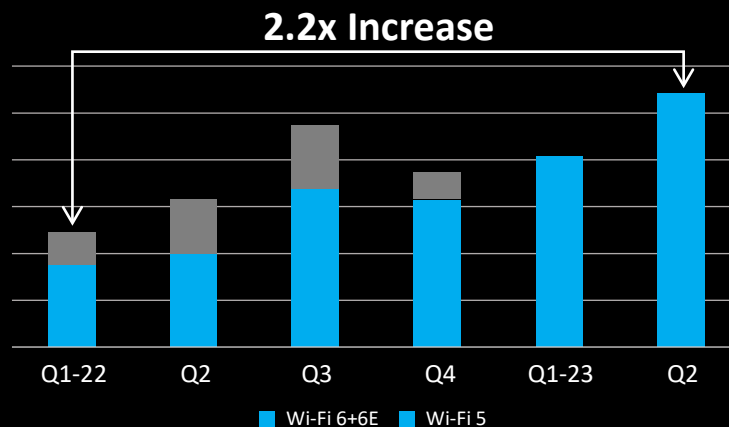
Simplification

Next Gen Architecture

Supply Chain

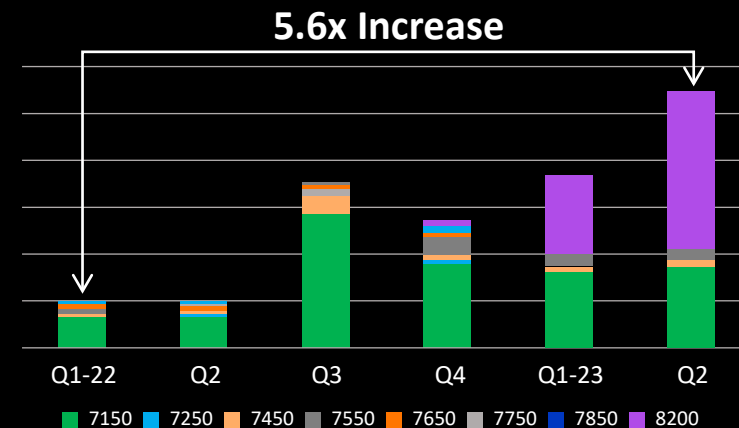
RUCKUS Supply Chain Recovery Well Underway!

- Material Pipeline
- Supplier Meetings
- Broker buys
- Product Redesigns
- Air Freight
- Manufacturing Investments



AP #Units Built

ICX #Units Built



**THANK
YOU**

Deep dive into RUCKUS One

Mario Socarras, RUCKUS SE Manager UK & I

Alex Claro, Director of Technical and Operations



RUCKUS ONE

Bringing Business Value To Your Customers

06th July 2023

Mario Socarras

RUCKUS SE Manager UKI

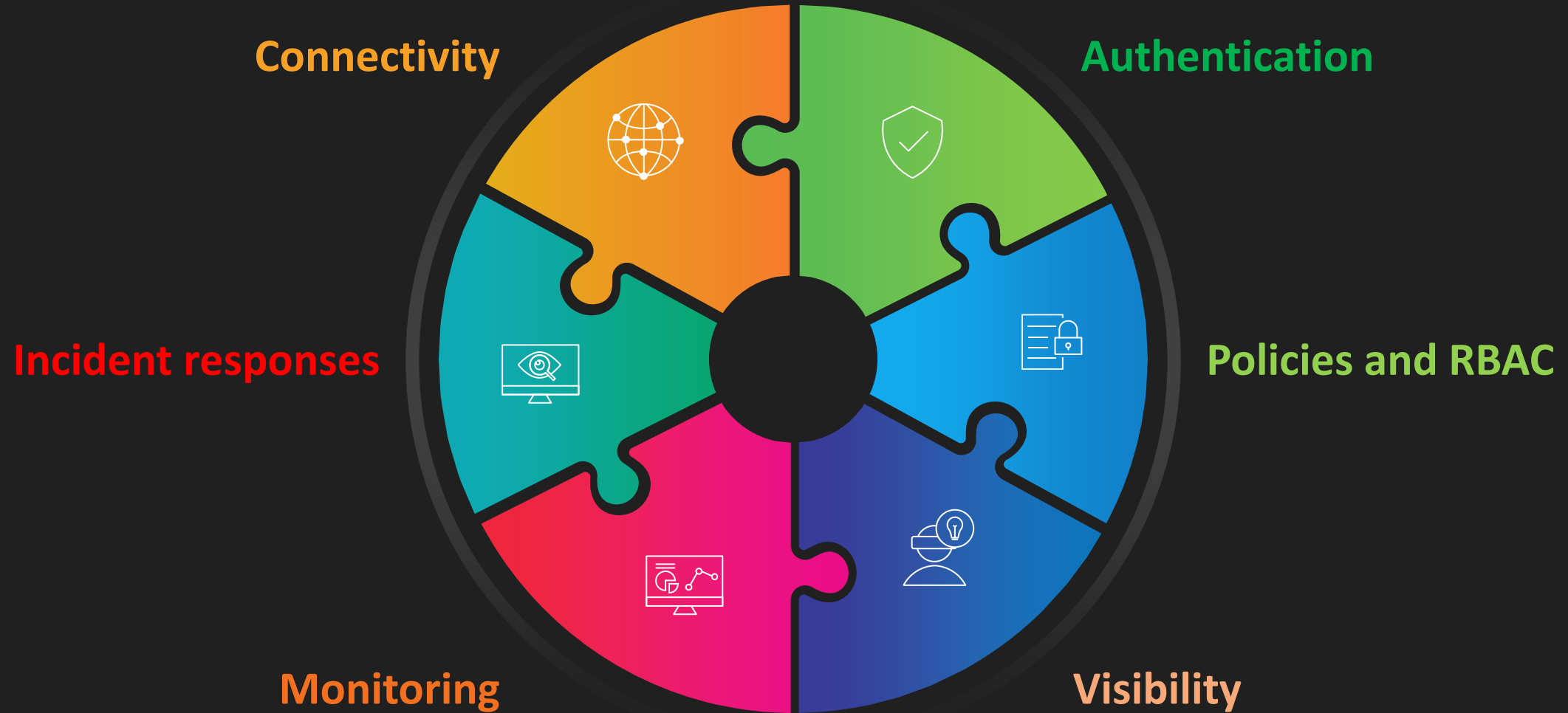
Alex Claro

PURDICOM Technical Director

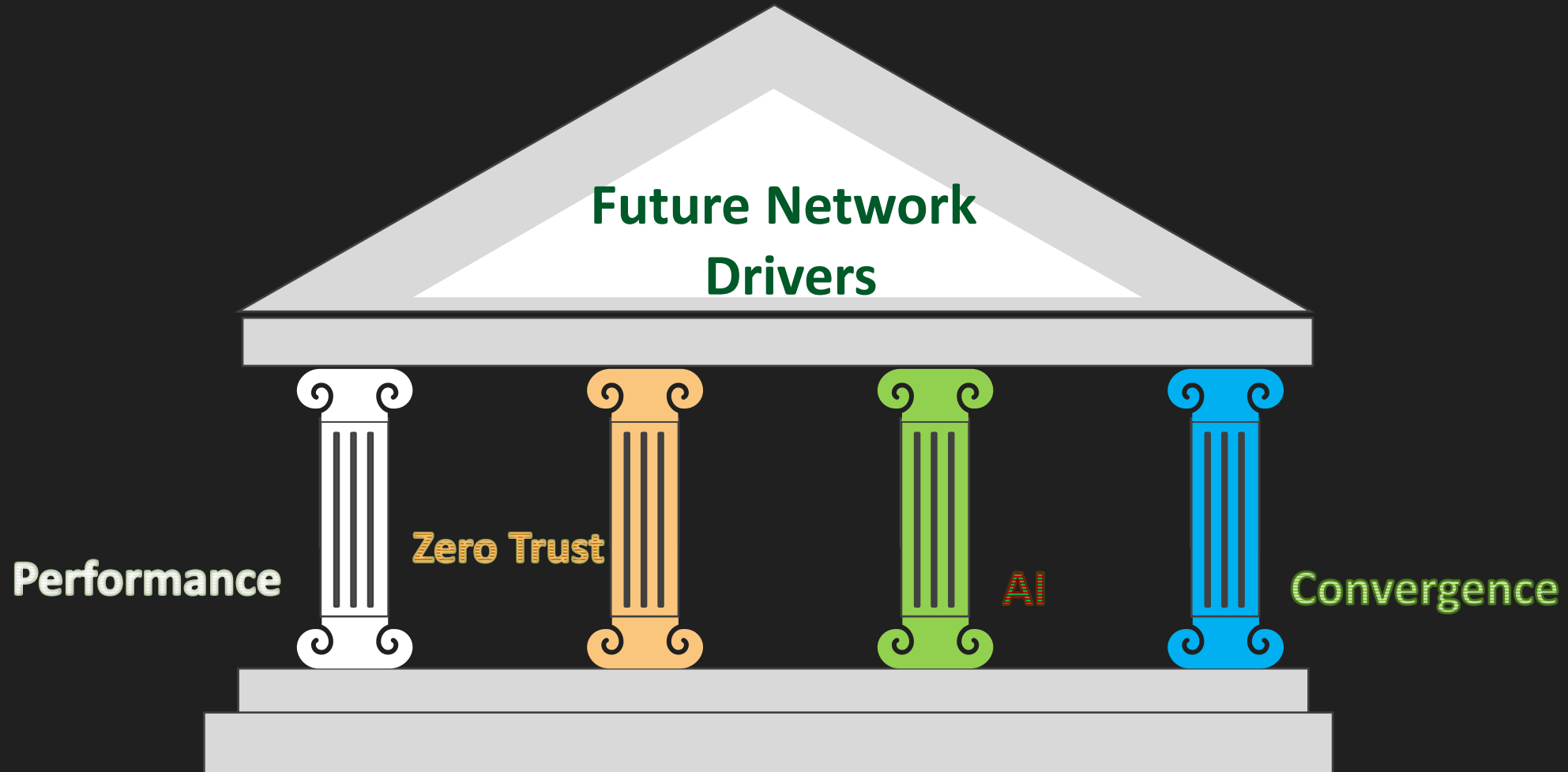


TM
TM

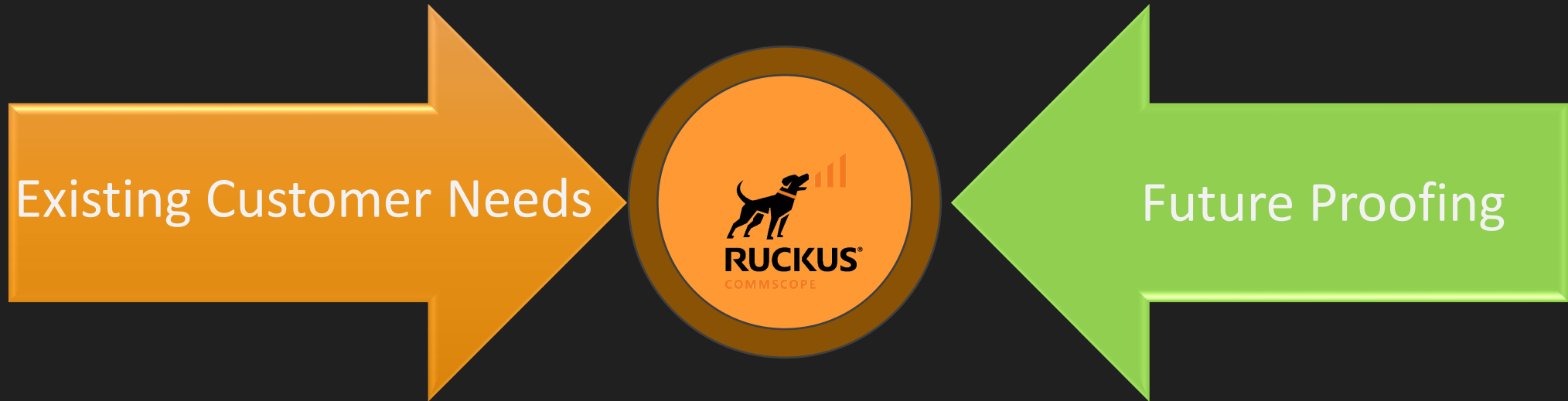
Customers Needs Today



Technologies Shaping Network's Future



Converging Today and Tomorrow



Introducing RUCKUS ONE



AI-Driven

Network Assurance

Service Delivery

Business Intelligence

Converged Platform

UNIFIED PLATFORM

Wi-Fi and Switching

SmartZone | RUCKUS Cloud | Unleashed

IoT

Solutions and Services | 3rd Party

Cellular

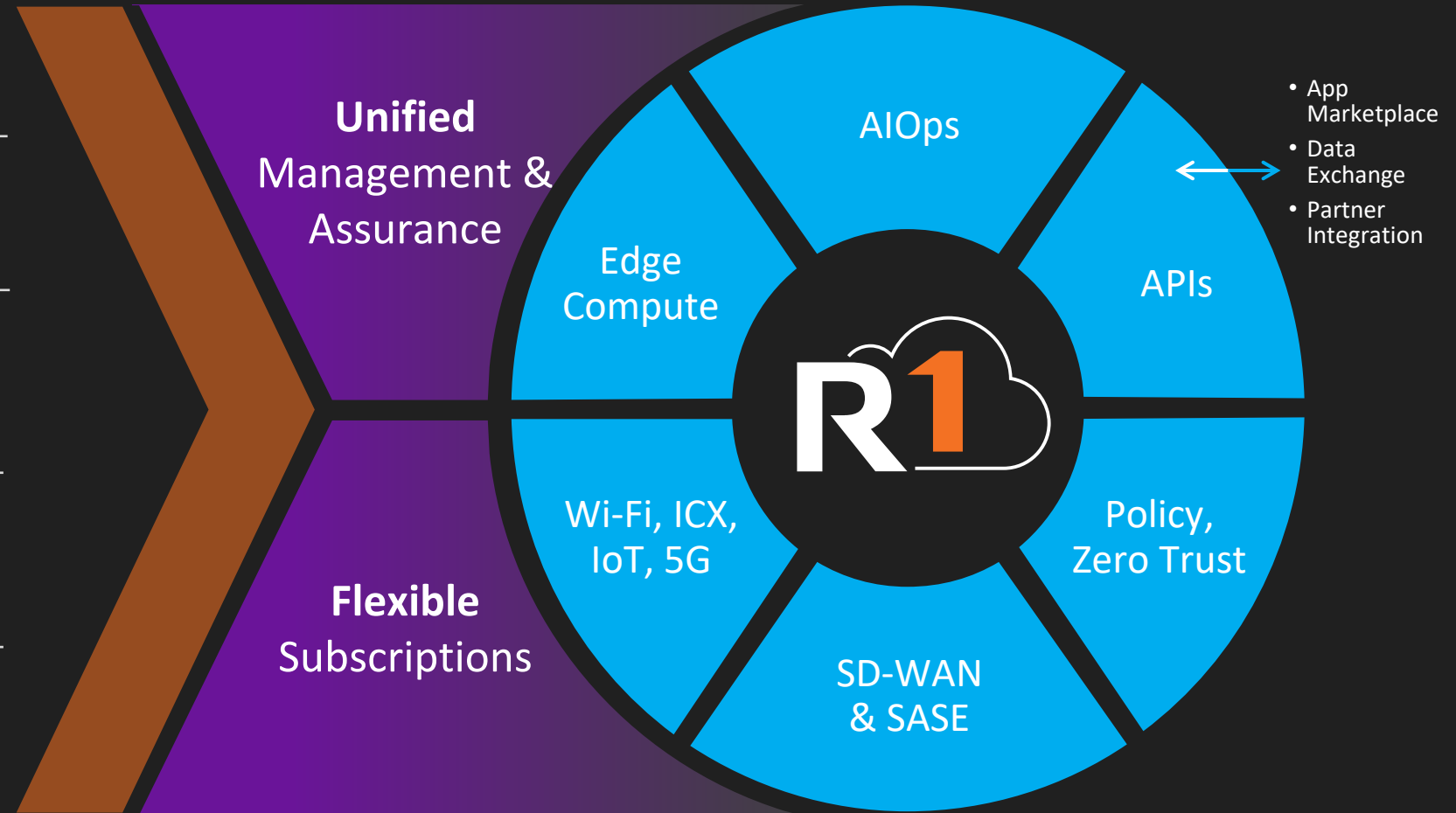
RUCKUS CBRS | OneCell

Security & Policy

Cloudpath | Edge solutions

Data & Analytics

RUCKUS Analytics | SC



PRIVATE | PUBLIC | HYBRID | FEDERAL | MANAGED CLOUD

RUCKUS One Architecture



Separate UI for Cloud,
RA, Cloudpath

SZ-powered
Microservices

Work-flow
Architecture

Manual Scale

SSH/Reverse SSH



New Converged UI

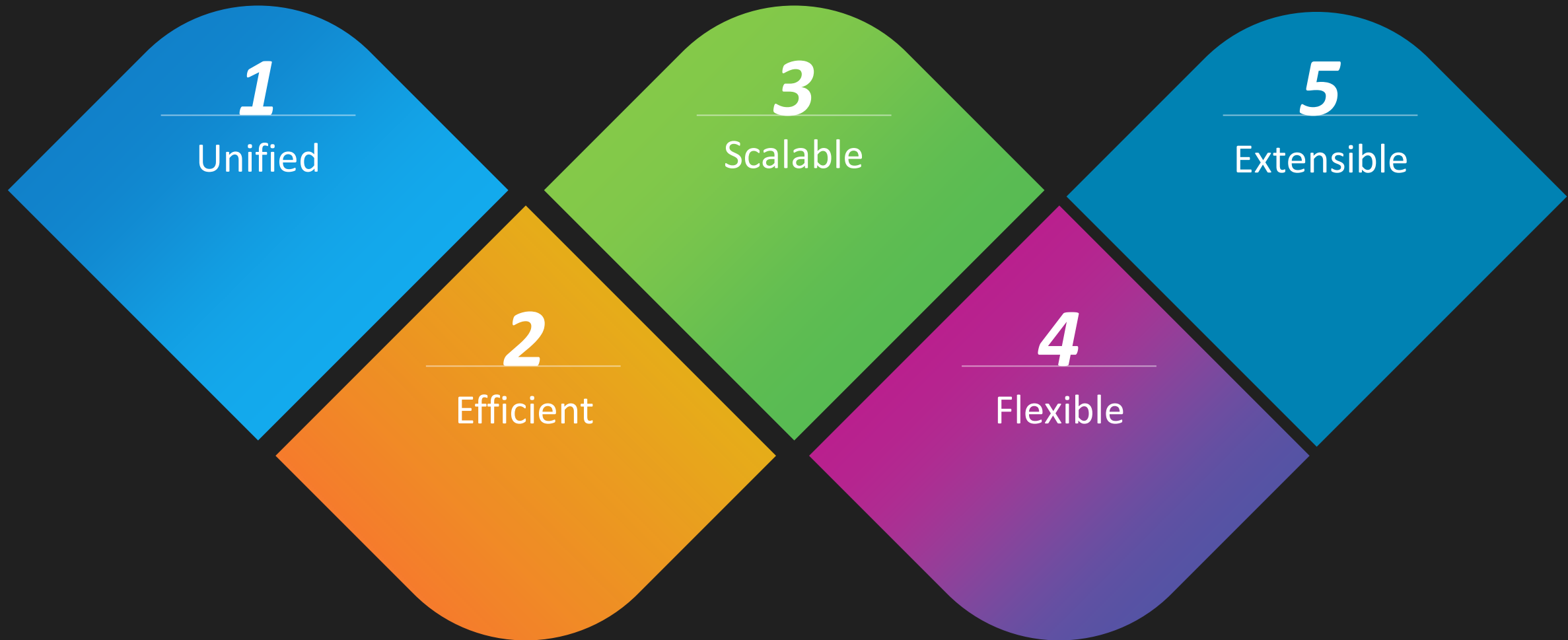
Cloud-native
Microservices

Event-driven
Architecture

Auto Scale

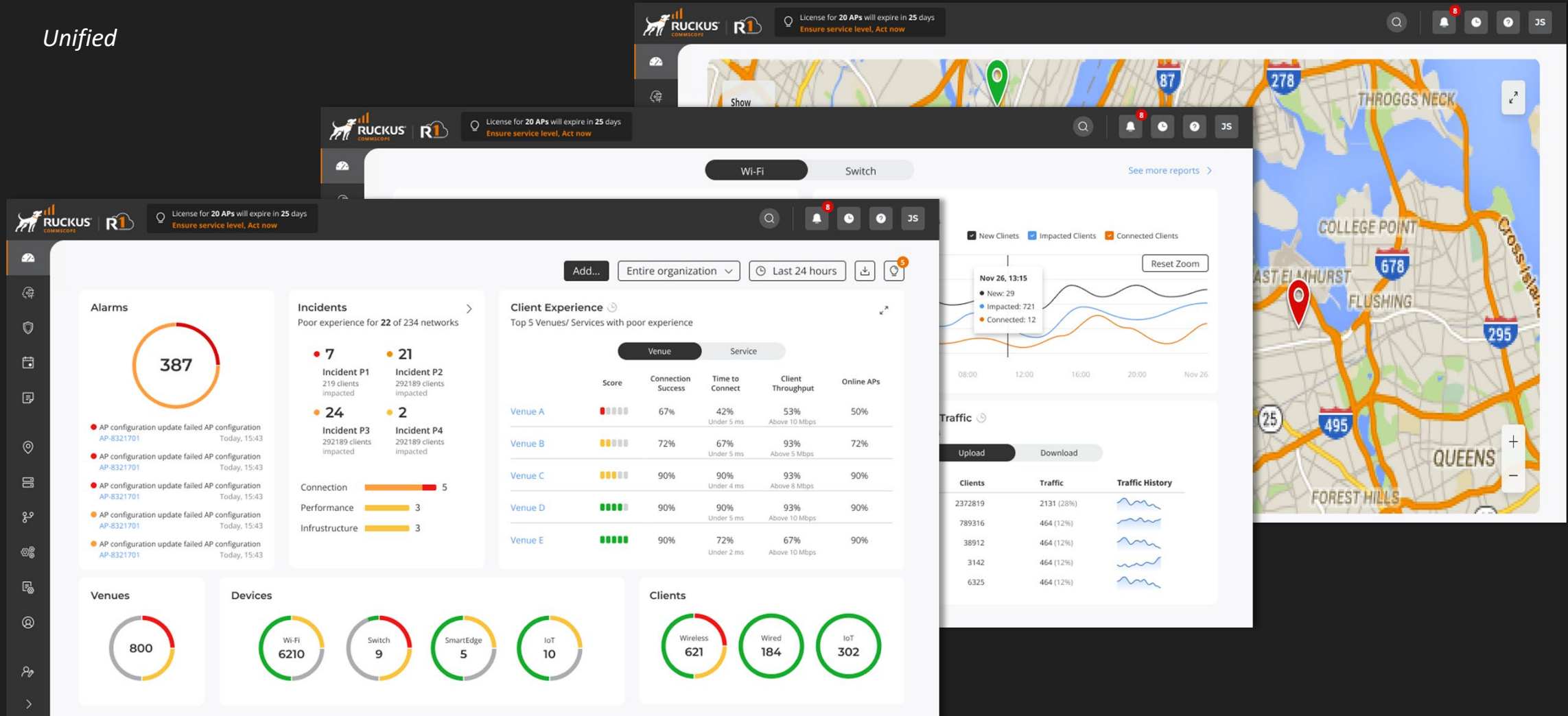
HTTPS/HTTP2
Websocket

RUCKUS One – Unique Value Proposition



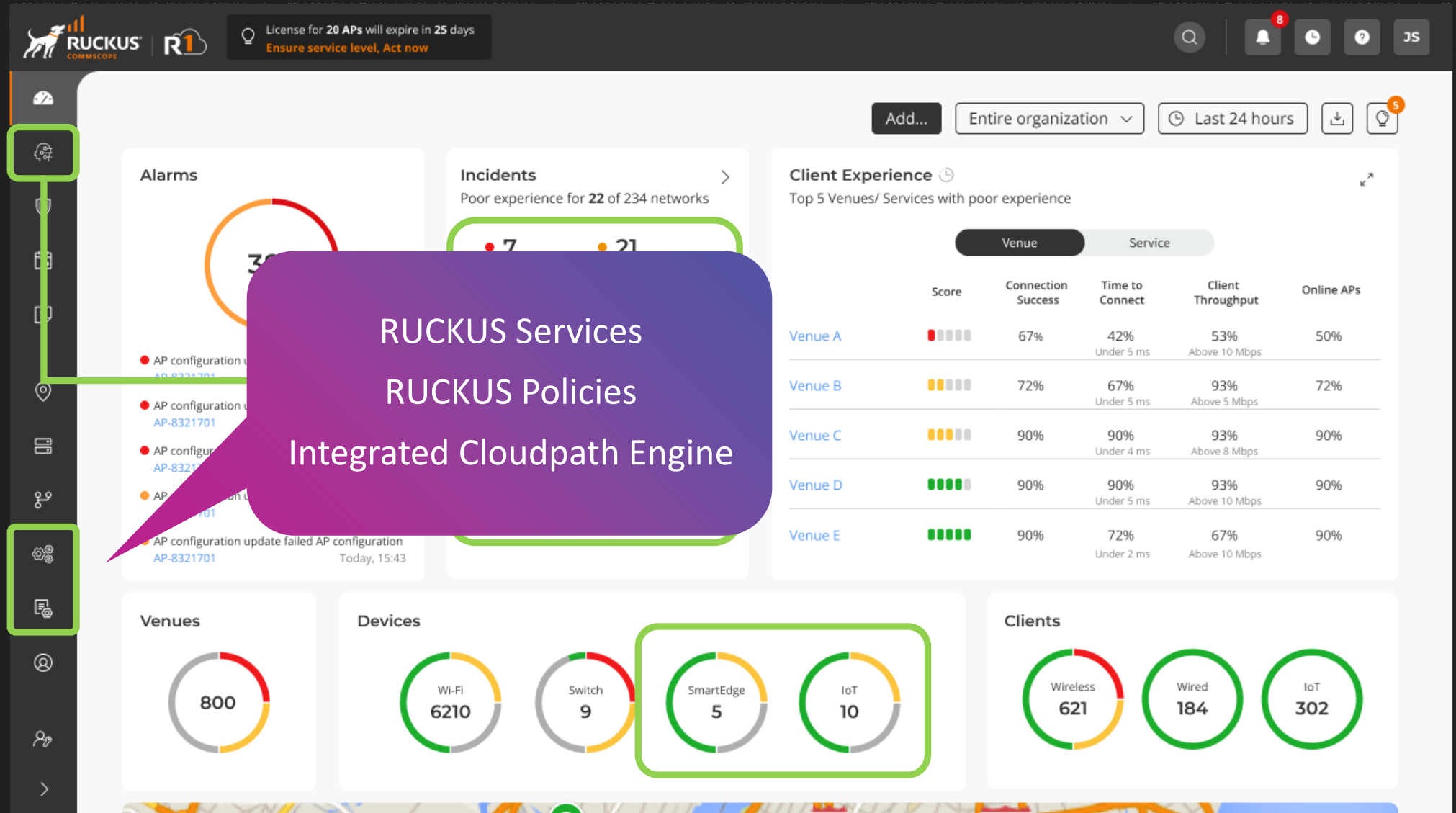
Unified UI

Unified



Integrated Dashboard

Unified





RUCKUS AI

**Spot issues before
they blow up**



ML-driven incident
and anomaly detection

**Most urgent issues
first**



AI-driven prioritization

Fix them fast



ML-driven root cause
and recommendations

**Compare network
KPIs before and after
a change**



Config change analysis

**Recommendations on
changes to improve
performance**



AI-recommendations

**Reduce power
consumption**



Sustainable ESG
recommendations



Home EU

- Dashboard
- AI Assurance
- Venues
- Clients
- Wi-Fi
- Wired
- Network Control
- Business Insights

Administration

Collapse

Home Dashboards Charts **Gallery** Schedules

Gallery

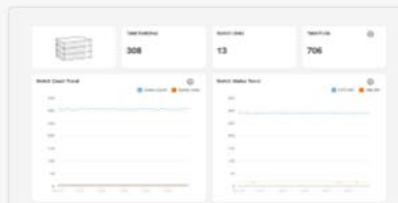
IT Operations

A set of dashboards that will provide more details about your network.



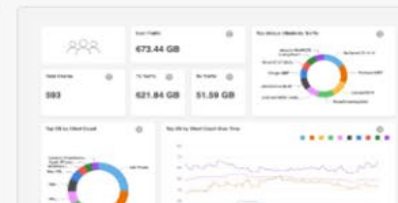
Access Points

Displays information about APs in the network.



Switches

Displays comprehensive information about switches details.



Clients

Displays detailed information about clients in the network.



Applications

Displays information about the applications used by client devices i...



Wired Network

Displays information about the wired components within the network.



Wireless Network

Displays information about wireless components within the network.



WLAN

Displays information about WLANs within the network.



Airtime Utilization

Displays information about airtime utilization within the network.



Incident Analytics



License for 20 APs will expire in 25 days
Ensure service level, Act now



Dashboard

AI Analytics

Incidents

Recommendations

Health

Config Change

Occupancy

Timeline

Reports

Venues

Devices

Networks

Services

Policies

< Collapse

AI Analytics /

Incidents

Type: Network | APs: 451 | Clients: 551 | Switches: 33

Entire Organization

Last 24 hours

Overview

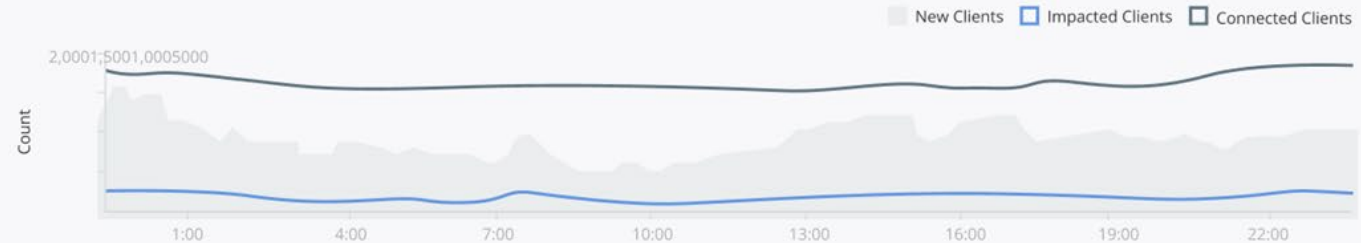
Connection

Performance

Infrastructure

Total Incidents

93 -15



0 selected

Mute | Unmute

Search...

All Severities

All Categories

All Types

☐	Severity	Date	Duration	Description	Category	Client Impact	Impacted Clients	Scope	Type
☐	> P1	May 01 2022 12:00	3h 15m	High AP-Controller conne...	Infrastructure	100%	5	Ruckus-Public	Zone
☐	> P3	Sep 27 2022 11:00	2d 22h	VLAN mismatch found in...	Infrastructure	-	-	BDC_ICX	Switch Group
☐	> P2	Sep 28 2022 12:00	1h 00m	High memory utilization...	Performance	-	-	ICX8200-24	Switch
☐	> P2	May 01 2022 12:00	3h 15m	High AP-Controller conne...	Infrastructure	100%	5	Ruckus-Public	Zone

Configuration Change Analysis



- RUCKUS COMMSCOPE
-
- Dashboard
- AI Analytics
- Incidents
- Recommendations
- Health
- Config Change
- Occupancy
- Timeline
- Reports
- Venues
- Devices
- Networks
- Services
- Policies
- Collapse

License for 20 APs will expire in 25 days
Ensure service level, Act now

8

JS

AI Analytics /

Config Change

Type: Network | APs: 451 | Clients: 551 | Switches: 33

Entire Organization

Last 24 hours



Overview Connection Performance Infrastructure

Connection Success Before: 98% After: 95%	-3%
Time to Connect Before: 8s After: 9s	+1s
Client Throughput Before: 96% After: 96%	=
AP Capacity Before: 50 Mbs After: 50 Mbs	=
AP-Controller Connection uptime Before: 60% After: 80%	+20%
Online AP Count Before: 234 After: 212	-9%

Configuration Change Listing

+ Add KPI filter

Date	Entity Type	Entity Name	Configuration	Change from	Change to
May 01 2022 12:00	AP	34:20:E3:2D:29:60	Wlan Service (6 GHz)	True	False
May 01 2022 12:00	AP	34:20:E3:2D:29:60	Wlan Service (6 GHz)	True	False
May 01 2022 12:00	AP	34:20:E3:2D:29:60	Wlan Service (6 GHz)	True	False
May 01 2022 12:00	AP	34:20:E3:2D:29:60	Wlan Service (6 GHz)	True	False
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May 01 2022 12:00	AP	34:20:E3:2D:29:60	Wlan Service (6 GHz)	True	False
May 01 2022 12:00	AP	34:20:E3:2D:29:60	Wlan Service (6 GHz)	True	False



License for 20 APs will expire in 25 days
Ensure service level, Act now

Search

8

JS

Dashboard

AI Analytics

Incidents

Recommendations

Health

Config Change

Occupancy

Timeline

Reports

Venues

Devices

Networks

Services

Policies

Collapse

AI Analytics / Recommendations /

Tx Power: Same for 2.4 GHz and 5 GHz

Mute

Apply

Priority

High

Date

May 01 2022 12:00

Category

Wi-Fi Client Experience

Venue

Ruckus-Public

Status

New

Recommendation Details

2.4 GHz TX Power Adjustment

Current Configuration

Full

Recommended Configuration

-1dB

What is the recommendation?

Venue: Ruckus-Public is configured with the same transmit power on both 2.4 GHz and 5 GHz. Reducing the transmit power on 2.4 GHz will reduce co-channel interference and encourage clients to use 5 GHz.

Why is the recommendation?

Encourages client association to 5 GHz and reduces co-channel interference.

What is the potential trade-off?

2.4 GHz clients at the edge of Wi-Fi coverage may receive poor signal or lose connectivity.

Key Performance Indications

Co-channel Interference

9.12%

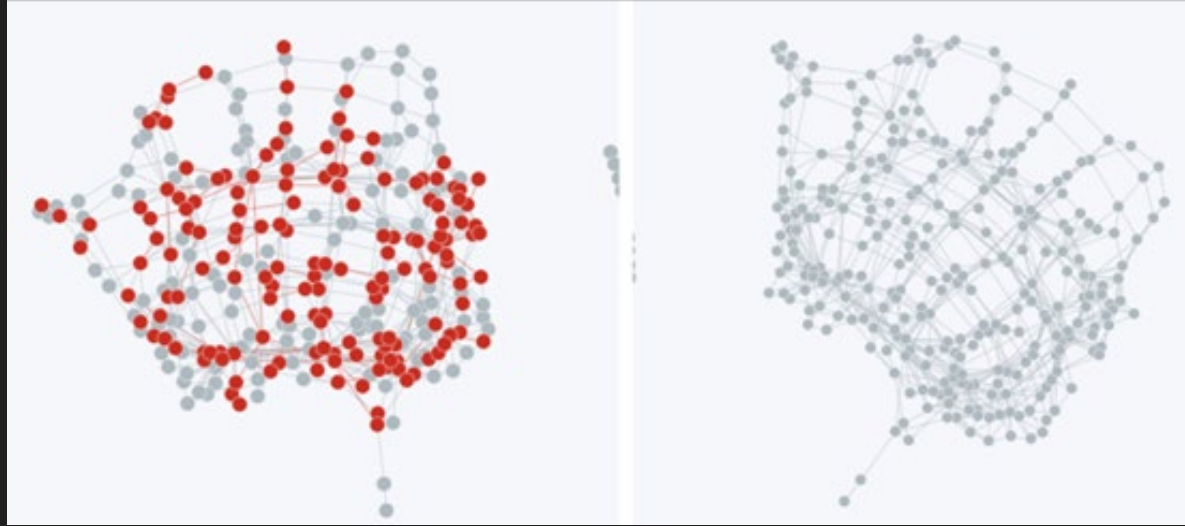
Session time on 2.4 GHz

64.13%

Status Trail

Jul 27 2021 04:00 New
Jul 28 2021 22:00 Apply Trigger
Jul 28 2021 22:01 Applied
Jul 20 2021 21:00 Revert Trigger
Jul 20 2021 21:01 Reverted

AI-Driven Cloud RRM



**Greater AP
Capacity**

**Higher client
throughput**

**Lower Airtime
Utilization**

**Higher
Reliability**

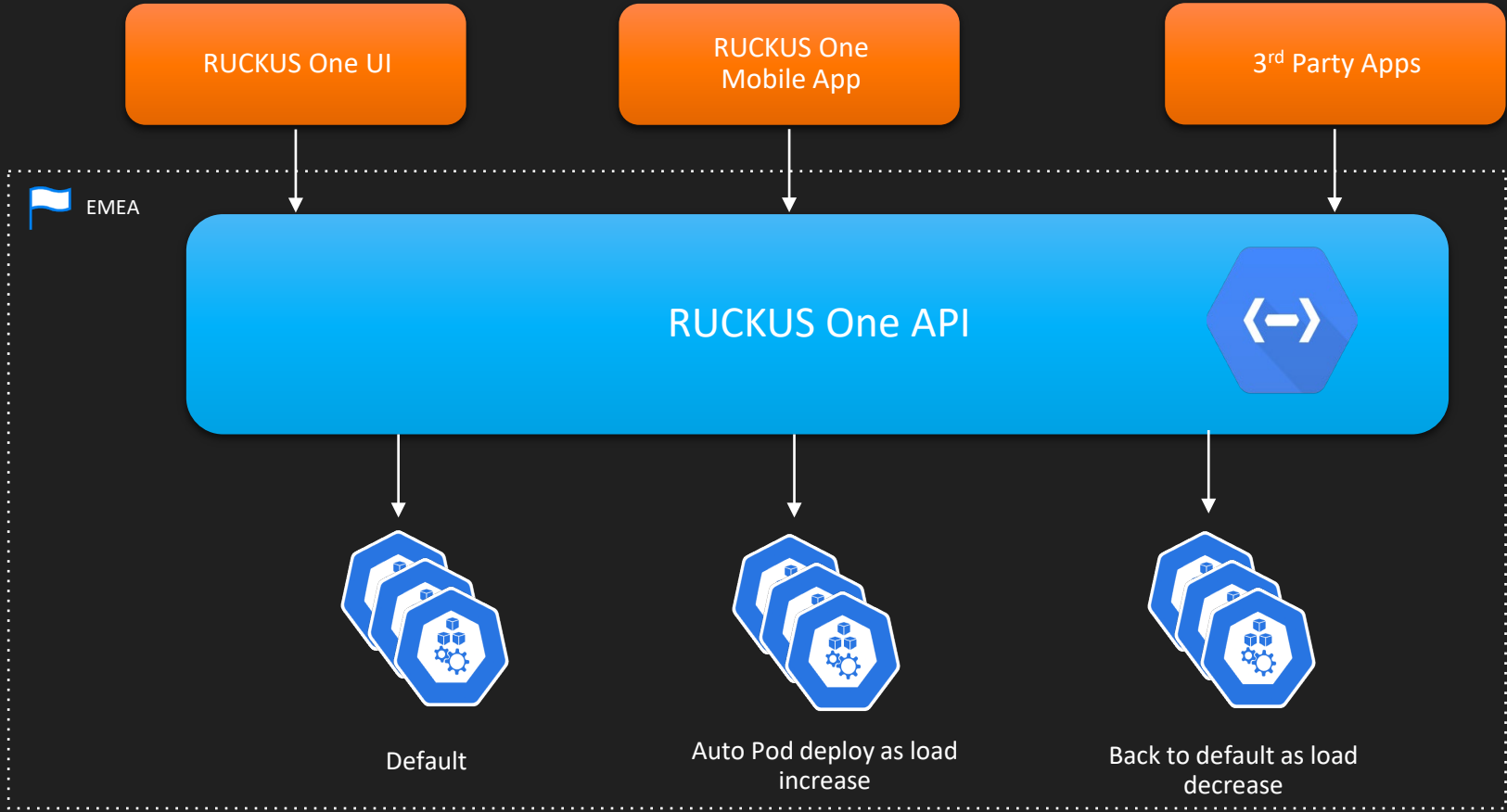
Operate APs at
MAX capability

Proactive, Network
Performance Optimization

Biggest advancement in Radio
Channel Management since
ChannelFly!

Scalable

Over 90 Event Driven Microservices



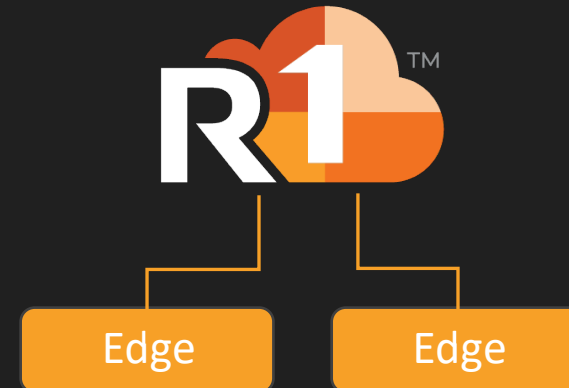
Flexible Deployment Options

Flexible

Pure Cloud



Hybrid Cloud/Edge



Flexible

Essentials Tier

- Account Administration
- Unrestricted Scale
- Basic Analytics
- Basic Cloudpath
- Basic IoT

Professional Tier

- Everything in Essentials
- Network Segmentation
- Advanced Analytics
- Advanced CloudPath
- Advanced IoT
- SSO Login

Flexible Licensing

- Consumption-based licensing



Add-On Services

- URL Filtering
- Edge Solutions

The Difference is...

	RUCKUS One Essentials	RUCKUS One Professional
Dashboards	Yes	Yes
Topology view	Yes	Yes
AI Incidents	Yes	Yes
AI Health	Yes	Yes
SLA	Yes	Yes
Client Troubleshooting	Yes	Yes
Fetchbot	Yes	Yes
Data Studio	Yes – 30 days of data	Yes – 365 days of data
Reports	Yes – 30 days of data	Yes – 365 days of data
Service Validation	No	Yes
AI Predictions	No	Yes
Video Call Quality of Experience	No	Yes (*Q3 2023)
Configuration Change Analysis	No	Yes (*Q3 2023)
AI Recommendations	No	Yes (*Q3 2023)
AI-Driven Cloud RRM	No	Yes (*Q3 2023)
Webhook Integrations	No	Yes (*Q4 2023)
Data APIs	No	Yes (*Q4 2023)
Occupancy Analytics	No	Yes (*Q1 2024)
Industry Vertical Specific Features		
Brand 360 for Hospitality	No	Yes (*Q1 2024)

Service Catalog



Extensible

 R1

Dashboard

AI Analytics

Service Validation

Timeline

Reports

Venues

Devices

Networks

Services

My Services

Service Catalog

Policies

Users

< Collapse

Service Catalog

Connectivity

DHCP

Provides IP Address to end devices

WiFi

Switch

Edge

Add

DPSK

RUCKUS Dynamic Pre Shared Key Service

WiFi

Add

Application

mDNS Proxy

Provides mDNS service

WiFi

Add

Wi-Fi Calling

Provides voice calling service over WiFi

WiFi

Add

Guest & Residents

Guest Portal

Provides "portal" for guest access. Includes hotspot access (Passpoint, OpenRoaming)

WiFi

Add

Resident Portal

Provides "portal" for guest access. Includes hotspot access (Passpoint, OpenRoaming)

WiFi

Add

44 | © 2019 CommScope, Inc.

MSP Business with RUCKUS One



Extensible

US ▾

Antelope Valley Union High School District

🔍

🔔

🕒

?

JS

Customers

Users

Integrators

Device Inventory

Licenses

Settings

Help

MSP Customers

🔍 Search...

📄 Manage own account

Add Customer

📄

Customer	Active Alarms	Status	Active Incidents	MSP Admins	Integrators	Wi-Fi Licenses	Ruckus Support ?	⌵
☐ AhwahneeArt	0	Active	12	3	1	2	☐	
☐ Bio	0	Active	5	3	2	0	☐	
☐ Bradley Miller	3	Active	9	3	1	0	☐	
☐ John1	2	Active	2	1	-	3	☐	
☐ My Construction Ltd	0	Active	7	4	2	2	☐	
☐ Novit-Cloud	1	Active	17	3	1	0	☐	
☐ QA Test	2	Active	10	2	1	0	☐	

RUCKUS One Subscriptions



Essentials Tier

- Account Administration
- Unrestricted Scale
- Basic Analytics
- Basic Cloudpath (*)
- Basic IoT (*)

Professional Tier

- Everything in Essentials
- Network Segmentation
- Advanced Analytics
- Advanced Cloudpath (*)
- Advanced IoT (*)
- SSO Login (*)

SKUs	Description
CLD-ESNT-APSW-REC1	Essentials AP/Switch Device 1-Year for End Customers
CLD-ESNT-APSW-REC3	Essentials AP/Switch Device 3-Year for End Customers
CLD-ESNT-APSW-REC5	Essentials AP/Switch Device 5-Year for End Customers
CLD-ESNT-APSW-EDU3	Essentials AP/Switch Device 3-Year for Education
CLD-ESNT-APSW-EDU5	Essentials AP/Switch Device 5-Year for Education
CLD-PROF-APSW-REC1	Professional AP/Switch Device 1-Year for End Customers
CLD-PROF-APSW-REC3	Professional AP/Switch Device 3-Year for End Customers
CLD-PROF-APSW-REC5	Professional AP/Switch Device 5-Year for End Customers
CLD-PROF-APSW-EDU3	Professional AP/Switch Device 3-Year for Education
CLD-PROF-APSW-EDU5	Professional AP/Switch Device 5-Year for Education
CLD-PROF-APSW-MSP1	Professional AP/Switch Device 1-Year for MSP
CLD-PROF-APSW-MSP3	Professional AP/Switch Device 3-Year for MSP
CLD-PROF-APSW-MSP5	Professional AP/Switch Device 5-Year for MSP

(*) 2H-2023 (anticipated)

RUCKUS One Analytics features



Essentials

- Network management
- 1 month data retention
- Incidents and insights
- Client troubleshooting
- AI health
- Venue SLA's
- Built-in & scheduled reporting
- Data Studio



Professional

- **Everything in Essentials plus:**
- 12 months data retention
- Service validation virtual client
- Video call QoE (post-GA)
- GraphQL, webhook APIs (post-GA)
- Config analysis (post-GA)
- AI recommendation (post-GA)
- AI-driven Cloud RRM (post-GA)
- AI-driven predictions (post-GA)
- Brand 360 (post-GA)

RUCKUS One Cloudpath features



Essentials

- RADIUS Server
- DPSK
- MAC Authentication
- Certificate Management
- Adaptive Policies
- Residence Portal
- PKI*
- TACACS+*
- PEAP*
- Passpoint v1/v2*
- Eduroam*
- Property Management*



Professional

- **Everything in Essentials plus:**
- Network Segmentation*
- Workflow engine*
- Future features

*Subject to changes, available Q4 2023

RUCKUS Cloud -> RUCKUS One

RUCKUS Cloud to RUCKUS One Mapping

- RC Only → RUCKUS One Essentials
- RC + RA bundles → RUCKUS One Professional
- RC + RA standalone → RUCKUS One Professional
- NOTES:
 - Only RA deployed with RC (not SZ) is considered.
 - At least 50% of devices need RA to be eligible for Professional tier.
 - RC renewals will be mapped to the new RUCKUS One SKUs.
 - RC SKUs will be announced end of sale at GA of RUCKUS One.

Mixing RUCKUS Cloud and RUCKUS One SKUs

SKUs	RUCKUS Cloud	RUCKUS One
Legacy RUCKUS Cloud SKUs	Supported	Supported
New RUCKUS One SKUs	Supported (WIP)	Supported

Forward Looking into 2H-2023 (*subject to changes)

- Pre-paid Consumption
 - Ability to pause usage within an extended expiration
 - Ability to add network devices without new licenses
- Mobility of licenses across regions and MSP ECs
- Built-in Cloudpath Users
- Add-On Expansions and Add-On Features
 - e.g., CP Users and IOT Devices
 - e.g., URL Filtering
- In-product “Essentials to Professional” Trials

Demo

Demonstration of the Ruckus One platform

Thank You



Lunch

Please return for 1.30pm as the next presentation will commence at this time

RUCKUS Analytics

Richard Leadbetter, RUCKUS Partner Account Manager

RUCKUS Analytics

Why you need to include it in your customer conversation!

6th July 2023

Richard Leadbetter
Partner Account Manager



TM

Does this look like your customer?

- Buying wired and/or wireless product at “bulk discount”
 - All too easy to compare 3 HW quotes, squeezing everyone's margin.
- Huge risk of them buying elsewhere – they don’t always see the value in “better” wired or wireless hardware.
- Support/SW renewals are a fraught experience.

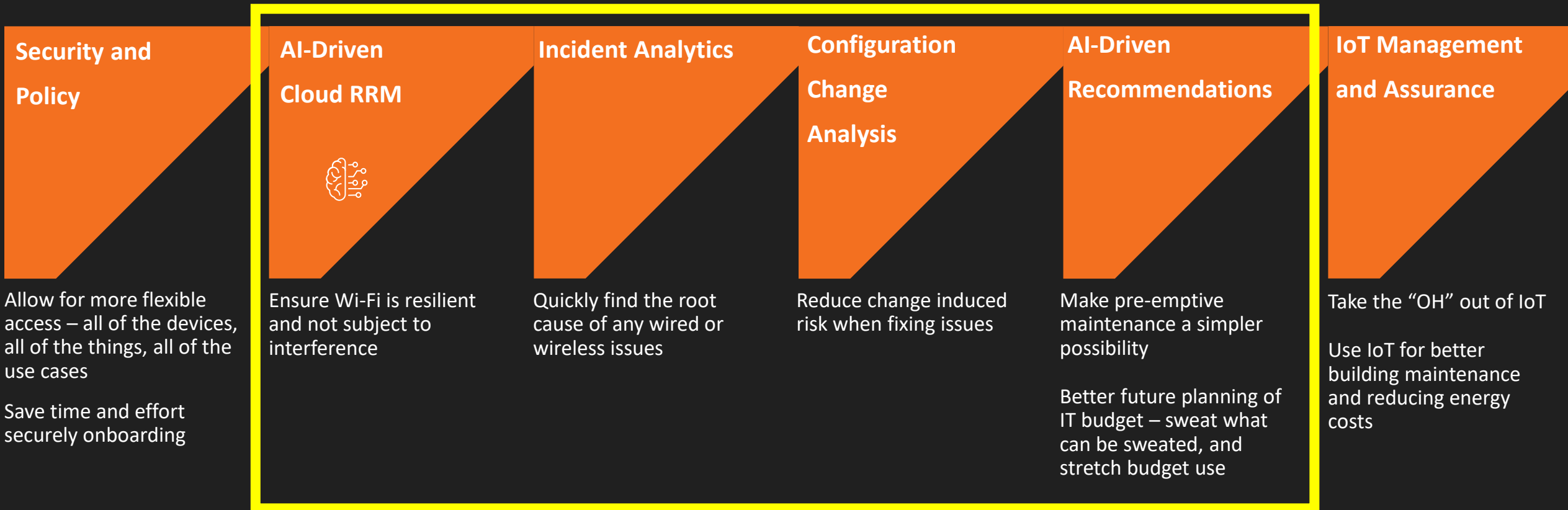
Stop leading with product sets as solutions

- Create your own solution that's closer aligned to the customer needs – as in business needs rather than solely IT – and protect/increase your margin
- Increase adoption within the customer user base to ensure renewal/upsell opportunities – vital as we move towards more SaaS selling
- Don't specifically think RUCKUS Analytics – think RUCKUS based solution, with Analytics the single UI to operate everything in alignment with the customer's needs

The RUCKUS® difference



Reduce IT support efforts, optimize spend; **improve outcomes.**



Analytics

What do customers care about, if we're not careful?

- **CapEx Price**
- **OpEx Savings / TCO**
- **Business risk**
- **Performance figures**

You can blame everything on the WiFi, but when it comes to a WiFi project seemingly it's just the hardware that's important!

Ask them! if your network hardware was free, how much would it cost you?

What's the true cost of customers' connectivity today?



- Separate management software costs – wired / wireless / security / IoT
- Inaccurate future planning— where are we today? What's tomorrow's budget to be?
- Lost IT support time due to disruption...and change related risk

42%

of network
professionals spend
too much time
troubleshooting

38%

of network
professionals cannot
proactively identify
network performance
issues

#1

ranking of **wireless**
as the top network
challenge

Create your solution with **RUCKUS Analytics**

Surface issues before
they blow up



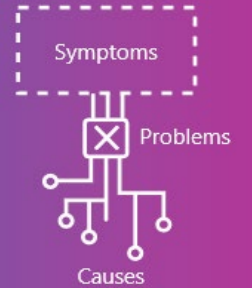
ML-driven incident and
anomaly detection

Address the most
urgent issues first



AI-driven prioritization

Fix them fast



ML-driven root cause
and recommendations

Compare network
KPIs before and after
a change to analyze
the impact



Config change analysis

Let the system make
recommendations on
changes to improve
network performance



AI-recommendations

Maintain and
report on SLAs

Understand the
user base

Plan for the
future...

Business Intelligence

Who benefits?

IT

Helps IT teams to
prioritize

Eliminate IT tribal
knowledge

Long term visibility
and monitoring of
network health

Support

Service Assurance

Accelerate
network and client
troubleshooting

Reduce the
number of service
affecting incidents

Line of
Business

Industry specific
reports

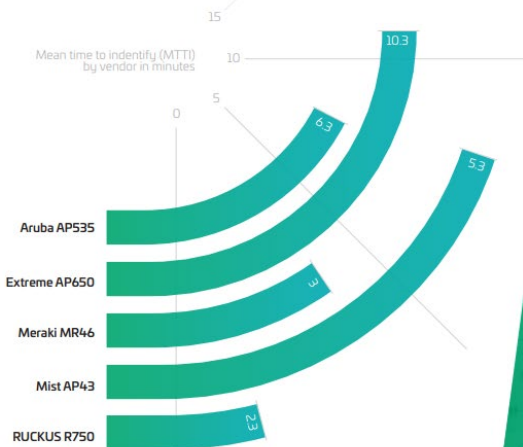
Business Analytics

Better planning
and forecasting

How that stacks up

Lowest Mean Time To Identification

Troubleshooting with network analytics tools

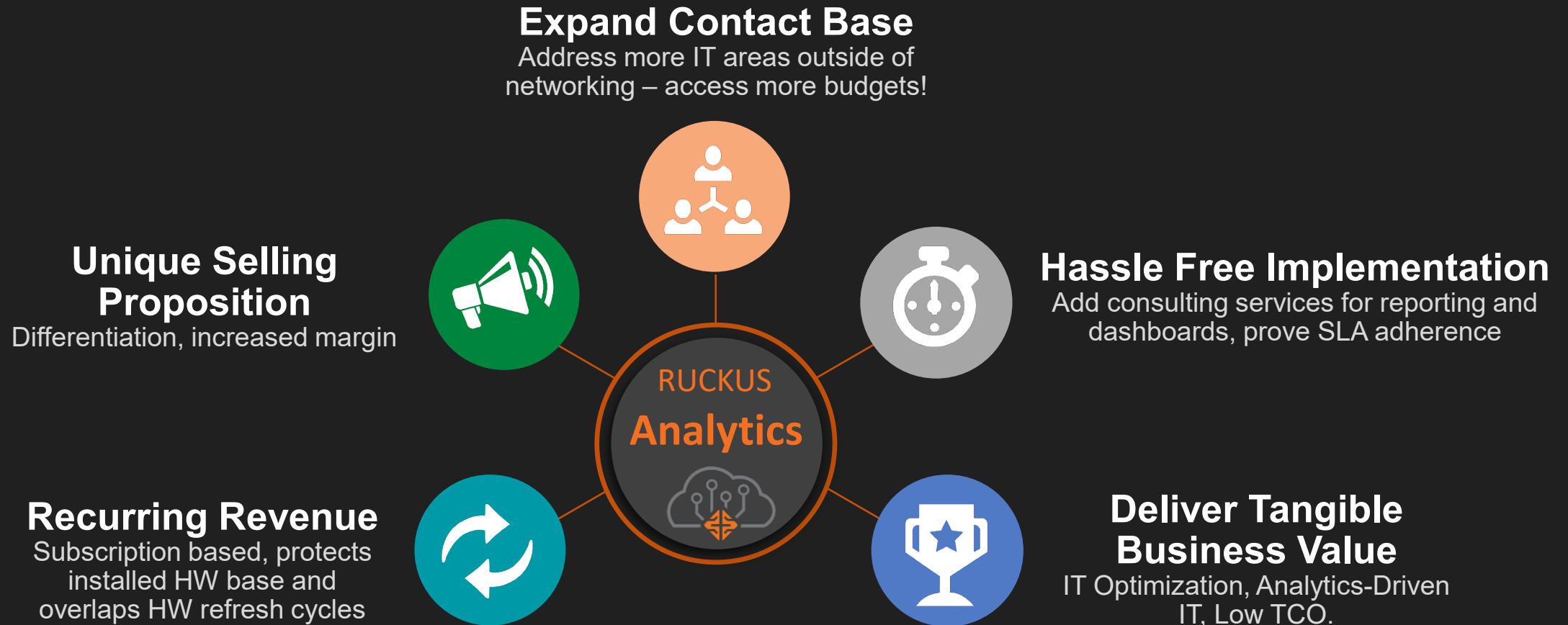


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- **20%** Fewer helpdesk tickets
- **60%** Savings of SME IT time
- **50%** Reduction in new IT hire training
- **80%** Reduction in customer churn

Partners also benefit!



Tomorrow's network and customer relationship?



- IT is a hands-free experience
 - Automated troubleshooting
 - Clear TCO/ROI for IT solution
 - Capacity planning just happens
 - Less IT heroes required
- Enhanced customer engagement
 - Increased professional services – don't sell the tool, sell the result of the tool. Better understanding of the customer challenge; protect yourselves from incoming competition
 - Clearer SLA management
 - Wider adoption leads to deeper customer involvement and increased chance of renewals

RUCKUS Analytics Demo

Sam Evans, Services Provider SE EMEA



RUCKUS IoT

Andy Barnes, Senior Director of Product Management



RUCKUS IoT

Insights Range of IoT Solutions

July 2023

Andy Barnes

Snr Director Product Management

Ruckus' IoT Portfolio is about **BUSINESS OUTCOMES**



SMART
CONNECTED
CITIES



MDU



HEALTHCARE



LARGE PUBLIC
VENUES



EDUCATION



HOSPITALITY

Problem: Every Silo Requires Duplicate Equipment

- Separate IoT Gateways
- More cabling
- No unified mgmt
- Lack of Coexistence
- High Costs

Value Prop #1



Ruckus Solution: Single Network for IT and OT

- 1 network for IT & OT
- 1 dashboard for ALL connected devices
- Enables correlated actions across devices
- Significantly lower cost

Value Prop #1



IoT

Devices

Gateways

Control/Manage

Solutions

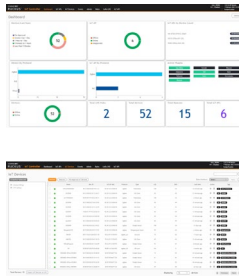


Expandable Radio's
Upgrade RUCKUS 11ac AP's

IoT Controller



Central Management Server
Secure IoT Network & API Control



RUCKUS IoT Gateway AP's
Multiple IoT Radio's (3 + Dual PAN)

INSIGHTS



Application-Level Data Processor
Service and Solutions Platform



Creating Solutions Across Verticals

Building Mgmt.



- Energy Management
- Automatic Fire, Flood, Toxic Gas Monitoring
- Building Occupancy determination, monitoring and Reporting

Safety and Security



- Cameras & Video surveillance integration
- Door Building Access Control
- Panic / Safety Alert
- Security Alarm condition monitoring

Location Services

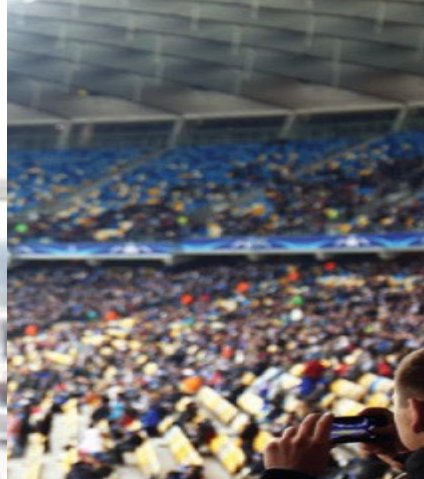


- Footfall analytics
- People, Asset Tracking
- Panic Button Safety monitoring
- Wayfinding / Visually impaired assistance

Employee Experience



- Smart Spaces
- Resource booking
- Secure workspace
- Environment monitoring
- Smart Parking / EV charging



SMART CONNECTED CITIES

MDU

HEALTHCARE

LARGE PUBLIC VENUES

EDUCATION

HOSPITALITY



LOCATION SERVICES

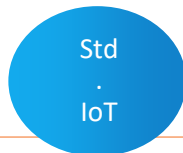
I/CONFIGURE



VIDEO / VMS



VAPE DETECTION



ASSA ABLOY

CONNECTED ENTRY



dormakaba

CONNECTED ENTRY



ENERGY MANAGEMENT

I/CONFIGURE



VIDEO / VMS

SmartThings



HOME AUTOMATION



LOCATION SERVICES

I/CONFIGURE



VIDEO / VMS

REACT
mobile



PANIC BUTTON

I/CONFIGURE



VIDEO / VMS



ENERGY MANAGEMENT



REACT
mobile



PANIC BUTTON



VAPE DETECTION

I/CONFIGURE



VIDEO / VMS



LOCATION SERVICES

REACT
mobile



PANIC BUTTON



VAPE DETECTION

SmartThings



HOME AUTOMATION

An Access Point for Every Network*

Good

Better

Best

Outdoor



USB/IoT

T350
Wi-Fi 6
2x2:2



USB/IoT

T670
Wi-Fi 7
TBD
GPS, SFP

Wi-Fi 7 : Q1'24



USB/IoT

T750
Wi-Fi 6
4x4:4
GPS, SFP

Indoor



USB/IoT

R350
Wi-Fi 6
2x2:2



R550
Wi-Fi 6
2x2:2



R650/R670
Wi-Fi 6
4x4:4 | 2.5GbE
Wi-Fi 7 : Q1'24*



R560
Wi-Fi 6E
Tri 2x2 | 5GbE



R750
Wi-Fi 6
4x4:4 | 2.5GbE



R850
Wi-Fi 6
8x8:8 | 2.5, 5GbE



R760/R770
Wi-Fi 6E/7
Tri 4x4 | 5GbE
Wi-Fi 7 : Q4'23*

Specialty



H350
Wi-Fi 6
2x2:2
2-port switch



H550
Wi-Fi 6
2x2:2
4-port switch



H-Series AP
Wi-Fi 7
TBD
Wi-Fi 7 : Q1'24

IoT Platform

IoT Insights

Foundation IoT Platform

Technology Agnostic

Flexible RBAC REST API

Marketplace/Store

Online Delivery

Integrated Floorplans

Extensible Rules Engine

Solution Framework

SDK & API Interface

Open Source

Documented Interface

Expanding Services

Ticketing Systems

External Data Services

Solution Driven Outcomes

IoT Cloud Integrations





Solution

Problem

RUCKUS Solutions → Real Customer Outcomes

Customer Outcome

Solution Features

Solution BOM

Customer ROI



Property Management
Tenant APP/Interface
Remote monitor/Control
Automate Handover Activity

Single Tenant Smart APP UI
Property Owner Management
Action Scheduler & Automator
Analytics & Simple operations

RUCKUS AP's (WiFi + IoT)
IoT Controller (Hosted)
Insights (on Prem)
MDvUe Solution

Single Property Manager
Automated X-Over Schedule
Advanced Smart Function
Reduced Site Visits/Costs



Reduced Carbon Footprint
Reduced OPEX Costs
Improved Efficiency
Increased Operational Safety

Legionella Detection
Water 20°C to 45°C
Realtime Monitoring
Alarm/Dashboard Interface

RUCKUS AP's (IoT)
IOT Controller (Hosted)
Insights 2.0 (Hosted)
Legionella Monitoring Solution

80,000 Samples Removed
100's Monitoring Staff Reused
100,000 Miles not Driven
Realtime Analytics/Analysis



Find Medical Equipment
Monitor Staff Response Times
Reduce Search Times
Identify theft/Removal

Track/Tag/Log Recall
Identify Devices and Staff
Monitor Locations and Closest
Alarms and Geofence

RUCKUS AP's (WiFi + IoT)
IOT Controller (on Prem)
Insights 2.0 (on Prem)
LBS Tracking Solution

Save Staff Time
Reduce Patient Losses
Reduced Equipment Theft
Identify Under utilized Kit



IoT Solutions

Insights for Solutions

Platform Deploy

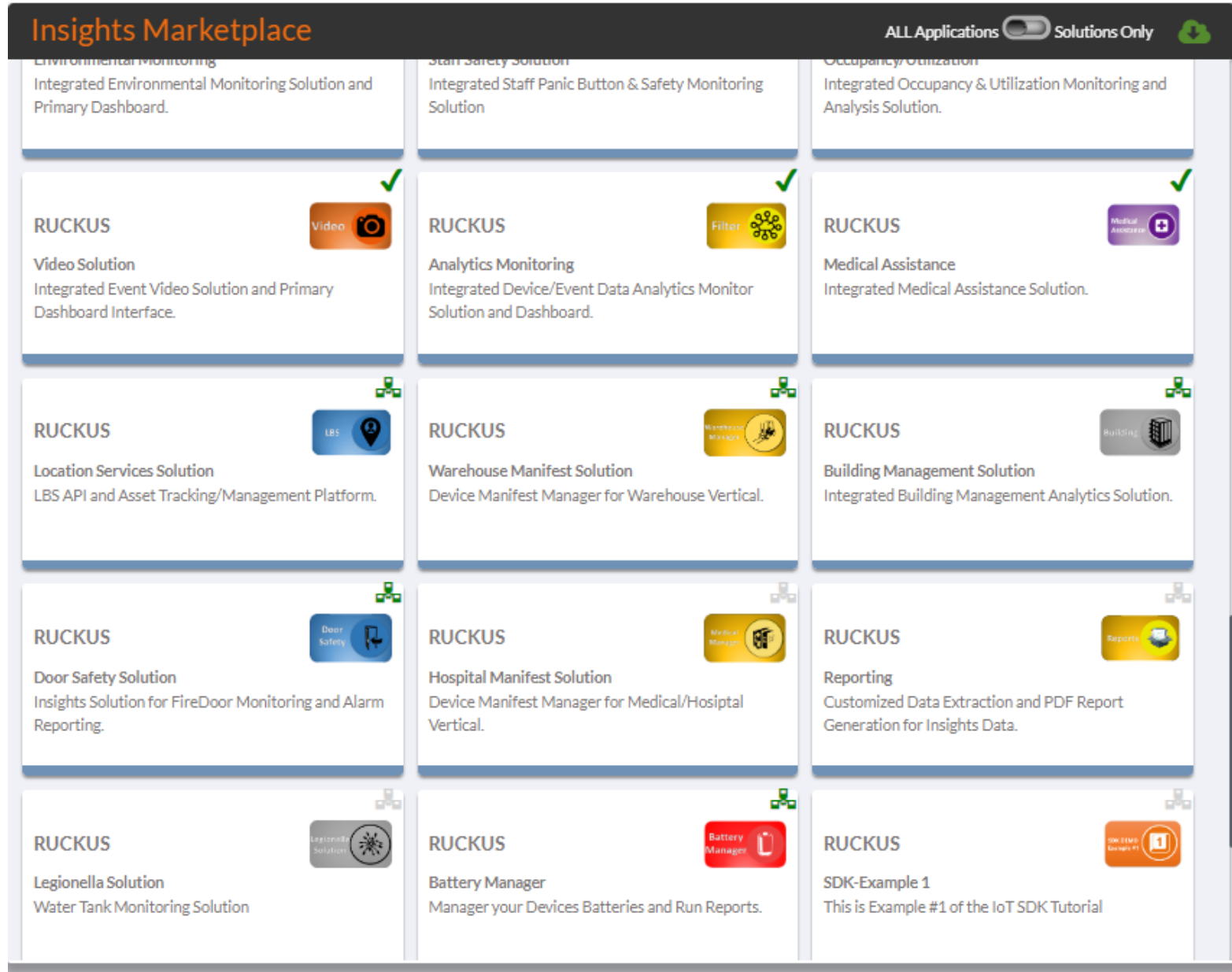
- Easy Application Deployment
- Online Service
- Free Upgrade Solutions
- Upgrade Free Enablement
- Download new solutions

Integrated SDK

- Developer Tutorials
- Build own Solutions
- Deploy on own/3rd party systems
- Customizable Licensing Models
- Easy to add to Marketplace
- Develop, Debug, Deploy

Multiple Services

- 3rd party Service Integration
- Integrated Solution Deployment



The screenshot displays the Ruckus Insights Marketplace interface. At the top, there's a header with the title "Insights Marketplace" and a toggle switch for "ALL Applications" and "Solutions Only". Below the header, a grid of solution cards is shown. Each card includes the Ruckus logo, a title, a description, and a category icon. The cards are arranged in a 4x3 grid. The first row shows "Environmental Monitoring", "Staff Safety Solution", and "Occupancy/Utilization". The second row shows "RUCKUS Video Solution", "RUCKUS Analytics Monitoring", and "RUCKUS Medical Assistance". The third row shows "RUCKUS Location Services Solution", "RUCKUS Warehouse Manifest Solution", and "RUCKUS Building Management Solution". The fourth row shows "RUCKUS Door Safety Solution", "RUCKUS Hospital Manifest Solution", and "RUCKUS Reporting". The fifth row shows "RUCKUS Legionella Solution", "RUCKUS Battery Manager", and "RUCKUS SDK-Example 1". Each card also features a small green checkmark icon in the top right corner.

Solution Title	Description	Category Icon
Environmental Monitoring	Integrated Environmental Monitoring Solution and Primary Dashboard.	Environmental Monitoring
Staff Safety Solution	Integrated Staff Panic Button & Safety Monitoring Solution	Staff Safety
Occupancy/Utilization	Integrated Occupancy & Utilization Monitoring and Analysis Solution.	Occupancy/Utilization
RUCKUS Video Solution	Integrated Event Video Solution and Primary Dashboard Interface.	Video
RUCKUS Analytics Monitoring	Integrated Device/Event Data Analytics Monitor Solution and Dashboard.	Analytics
RUCKUS Medical Assistance	Integrated Medical Assistance Solution.	Medical Assistance
RUCKUS Location Services Solution	LBS API and Asset Tracking/Management Platform.	LBS
RUCKUS Warehouse Manifest Solution	Device Manifest Manager for Warehouse Vertical.	Warehouse Manifest
RUCKUS Building Management Solution	Integrated Building Management Analytics Solution.	Building
RUCKUS Door Safety Solution	Insights Solution for FireDoor Monitoring and Alarm Reporting.	Door Safety
RUCKUS Hospital Manifest Solution	Device Manifest Manager for Medical/Hospital Vertical.	Hospital Manifest
RUCKUS Reporting	Customized Data Extraction and PDF Report Generation for Insights Data.	Reporting
RUCKUS Legionella Solution	Water Tank Monitoring Solution	Legionella Solution
RUCKUS Battery Manager	Manager your Devices Batteries and Run Reports.	Battery Manager
RUCKUS SDK-Example 1	This is Example #1 of the IoT SDK Tutorial	SDK-Example 1

Insights SDK

Tutorials

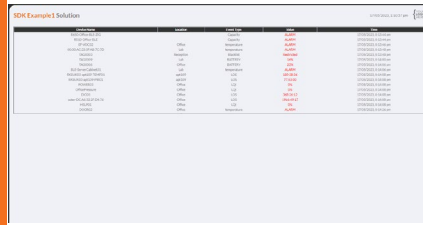
Build a Marketplace Application
Provided html, css, js examples
Modify Code on Own File System
10 Step by Step Examples
Build IoT Data Solutions
Simple Angular API & UI Coding
Add Graphs & Floorplans
Integrate Rules/Video easily

Build Packages

Check Code For Build
Assign Serial Number
Build Encrypted Image
Distribute

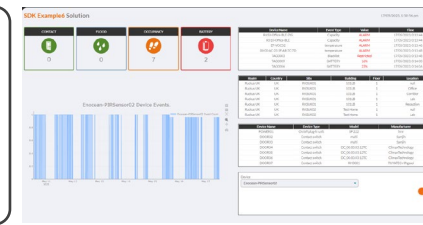
Install Package

Deploy your own Solutions



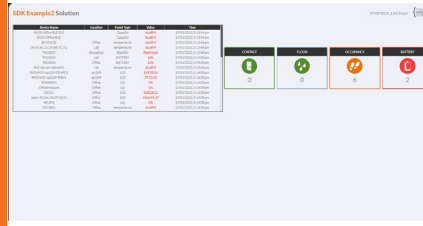
Example #1

- Live Device Events



Example #6

- Example 5 +
- Device Event Graphing



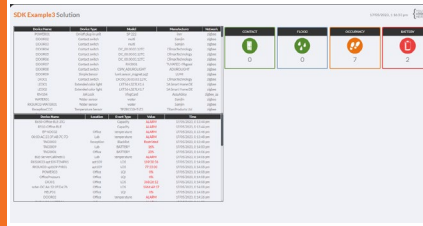
Example #2

- Example 1 +
- Event Counters/Icons



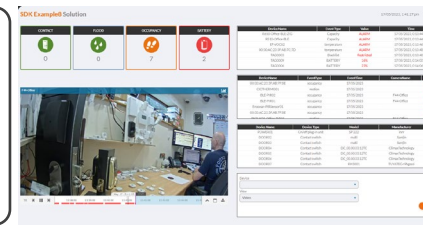
Example #7

- Example 6 +
- Floorplan View



Example #3

- Example 2 +
- Device List



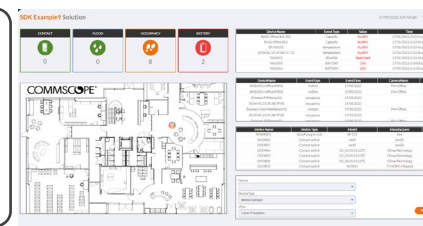
Example #8

- Example 7 +
- Event Video ID
- Video Event Recall



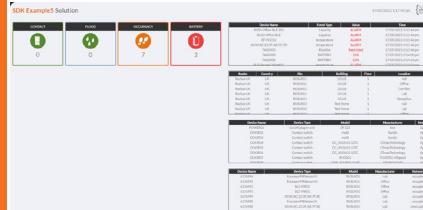
Example #4

- Example 3 +
- List of All Locations



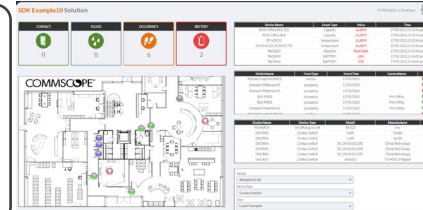
Example #9

- Example 8 +
- Device Type Filter
- Floorplan Filter Type



Example #5

- Example 4 +
- Last Events/Activity



Example #10

- Example 9 +
- Rules Integration
- SMS/E-mail Triggers



Examples Build on Previous to explain how API/Features integrate & to Build Solutions

Solutions

“Change the Conversation”

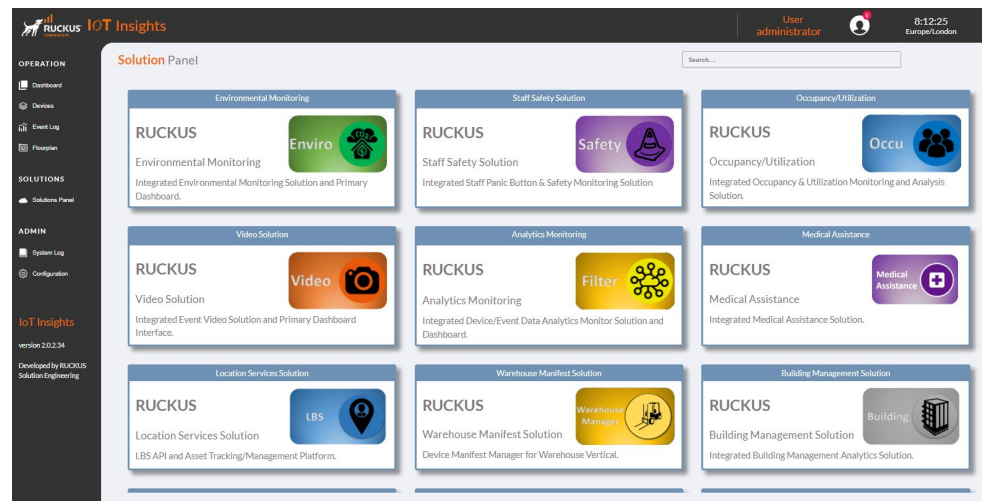
Customers are increasingly **buying solutions**, not networks

Differentiated revenue opportunities for partners

Reduce Partner complexity

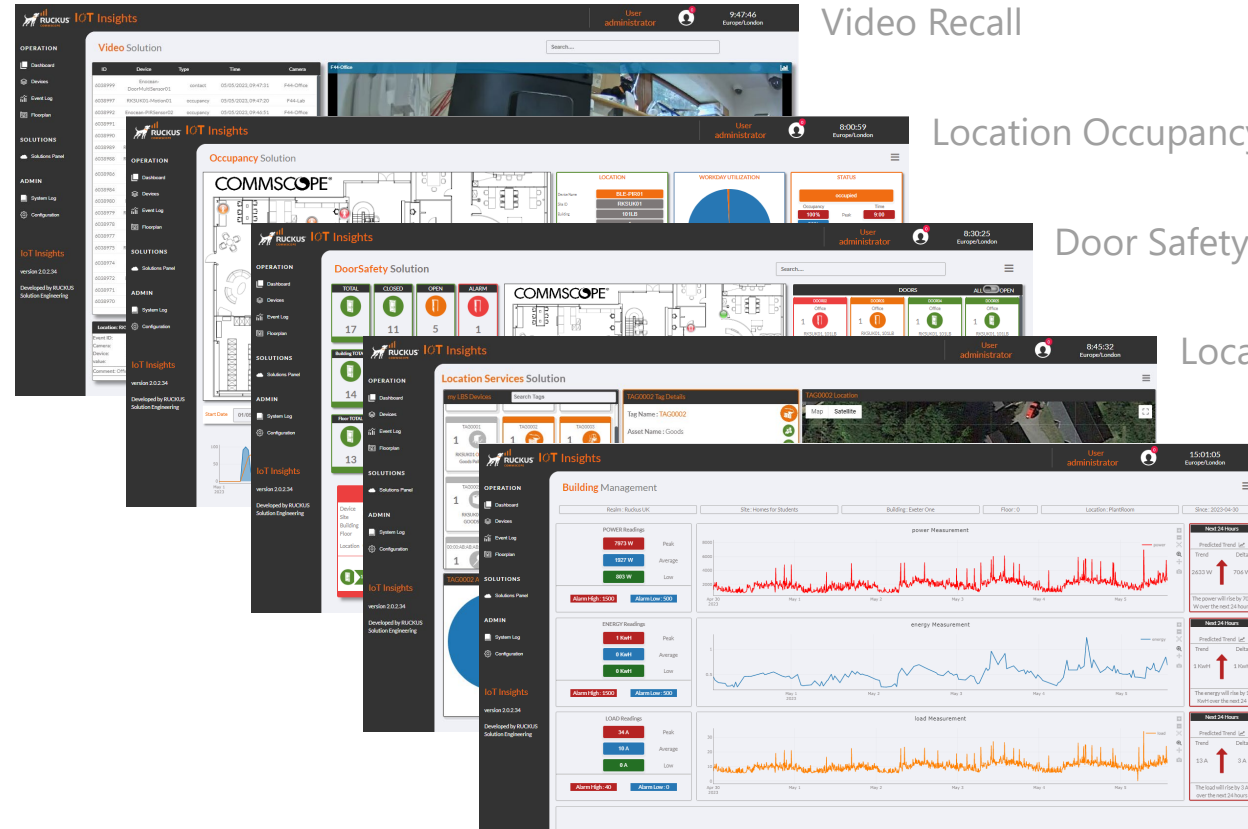
Containerization enabling easier integrations and solution creation.

All Built using the SDK



Insights 2.0 Solution Panel

15+ Released or in Development



Video Recall

Location Occupancy

Door Safety

Location Services

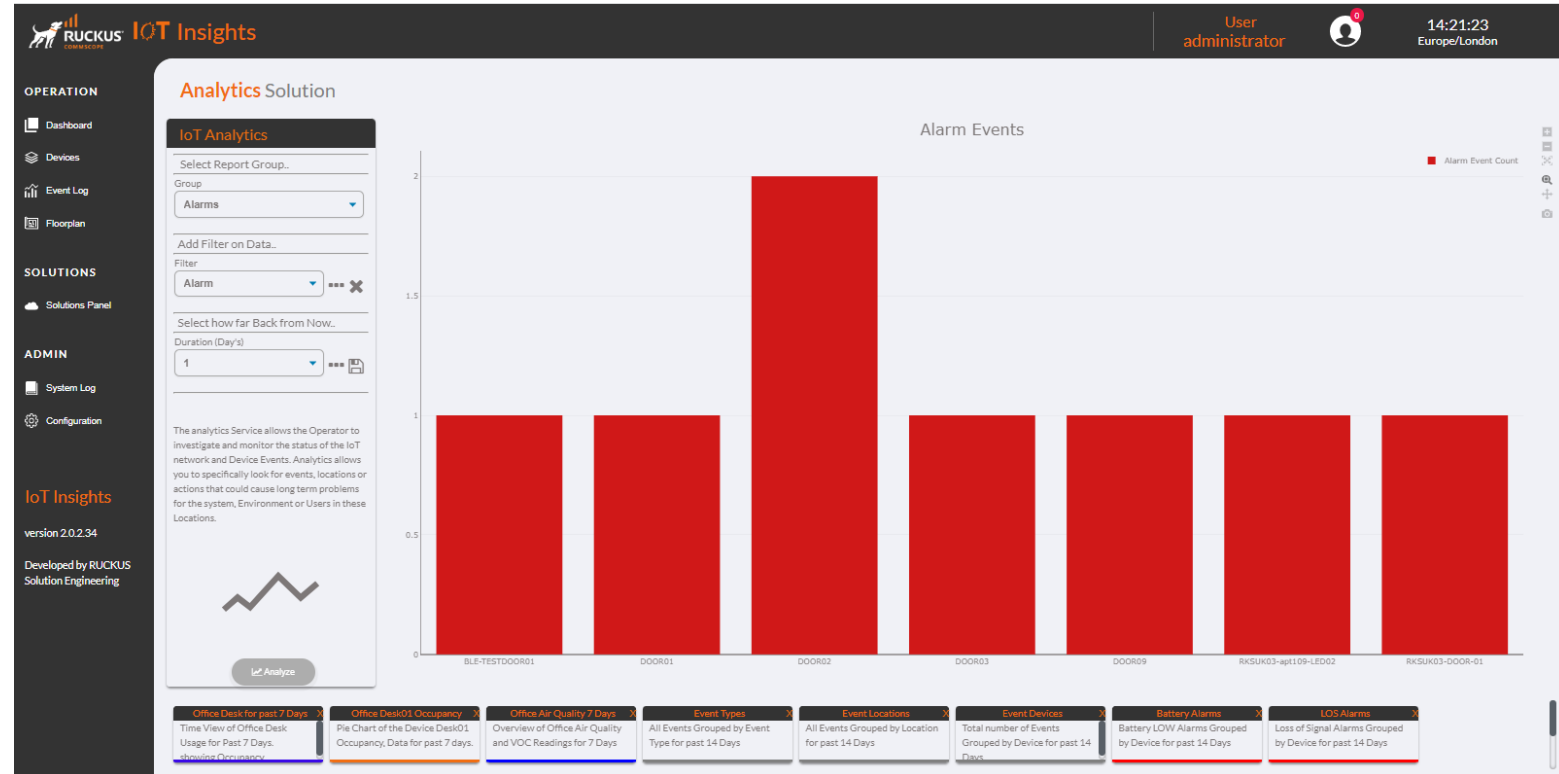
Building Management

Analytics

Understanding IoT Data

- Easy for graphing IoT Datapoints
- Save Frequent Searches
- Configurable Search Parameters
 - By Type of Event/Activity
 - Location or Specific Device
 - Configurable Date Range
- Radio Technology Agnostic
- Location based range Conversion
- No Data Type Restriction
- Recall and Analyse All IoT Data

“Provides Easy access to recall Analyze Filter and Visualize your Data”



HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓	✓	✓	✓	✓	✓	✓	✓

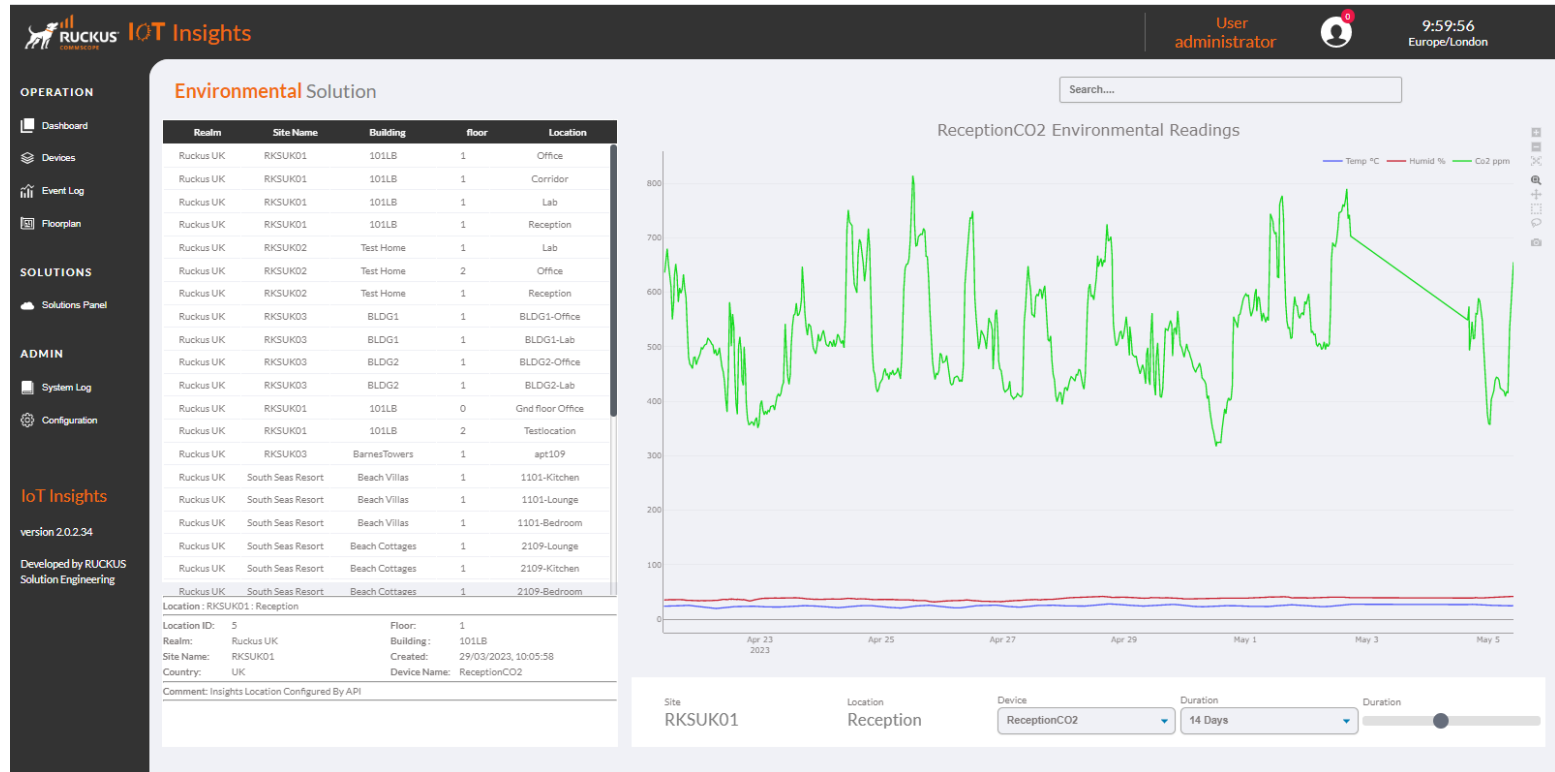
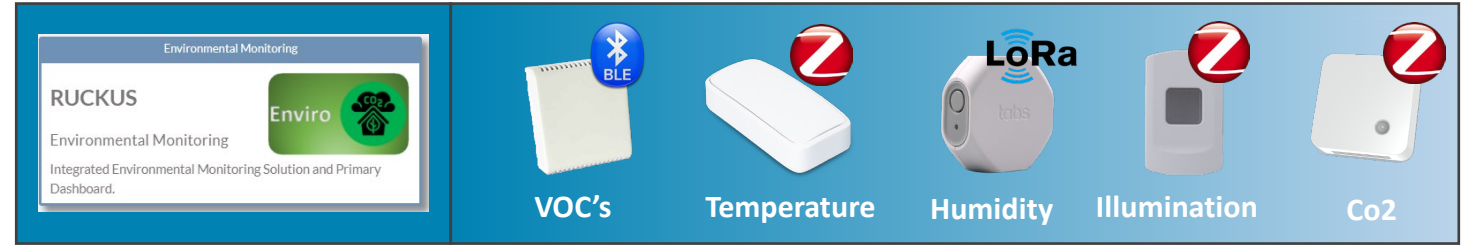
Environment

Health and Wellbeing

- Recall Environment metrics
- Filter based on Location
- Visualize data for Device and Date
- Interactive Graphing
- Export Graphs as Images
- Technology and Sensor Agnostic
- Radio Protocol Independent

Recall Environmental Data for Analysis and Visualization

“Statement”



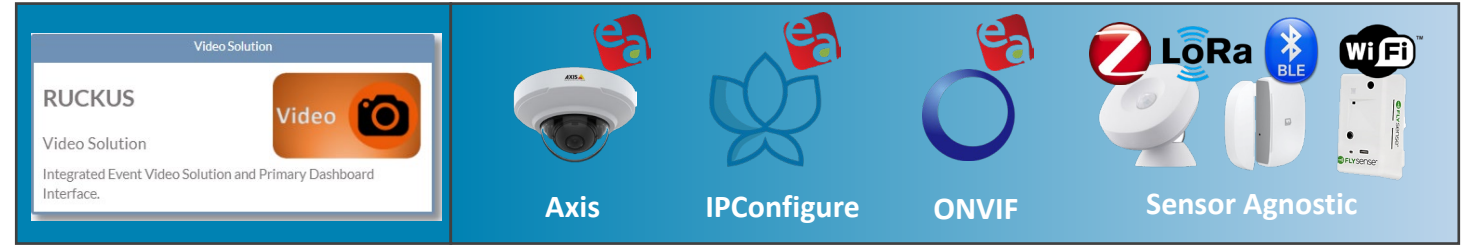
HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓	✓	✓	✓	✓	✓	✓	✓

Video Recall

Event Video Association

- IoT Event & Video Capture
- Automatic Event Association
- Zero Touch Activation/Configuration
- Event based Recall
- Any IoT Event Support
- Fully Integrated Time/Event Search
- Open Camera Support “ONVIF/RTSP”

Instant Video Recall to ANY IOT Event
 “Ensure Easy Video Event Recall and Analysis from any IoT Event ”





User administrator
 9:47:46 Europe/London

OPERATION

- Dashboard
- Devices
- Event Log
- Floorplan

SOLUTIONS

- Solutions Panel

ADMIN

- System Log
- Configuration

IoT Insights
 version 2.0.2.34
 Developed by RUCKUS Solution Engineering

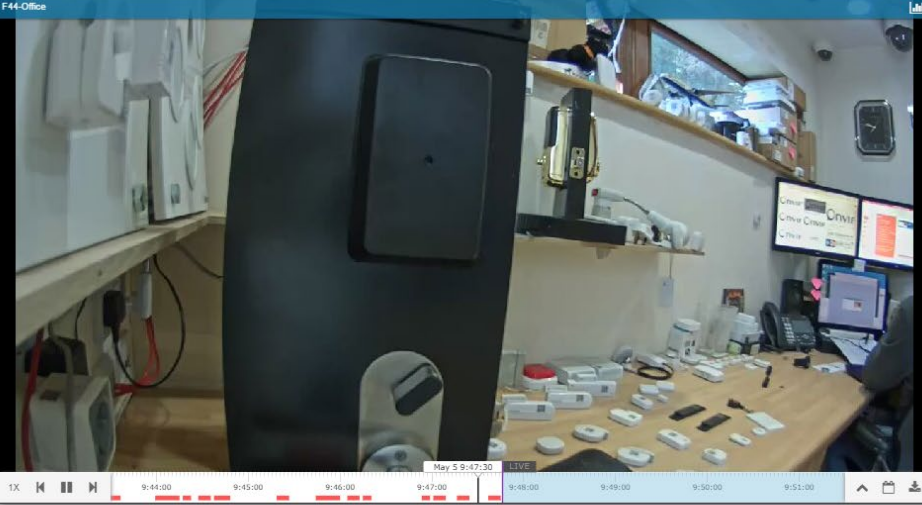
Video Solution

ID	Device	Type	Time	Camera
6038999	Enocan-DoorMultiSensor01	contact	05/05/2023, 09:47:31	F44-Office
6038997	RKSUK01-Motion01	occupancy	05/05/2023, 09:47:20	F44-Lab
6038992	Enocan-PIRSensor02	occupancy	05/05/2023, 09:46:51	F44-Office
6038991	BLE-PIR02	occupancy	05/05/2023, 09:46:50	F44-Office
6038990	BLE-PIR01	occupancy	05/05/2023, 09:46:50	F44-Office
6038989	RKSUK01-Office-PIR01	motion	05/05/2023, 09:46:41	F44-Office
6038988	RKSUK01-Office-PIR01	motion	05/05/2023, 09:46:40	F44-Office
6038986	Enocan-DoorMultiSensor01	contact	05/05/2023, 09:46:33	F44-Office
6038984	RKSUK01-Motion01	occupancy	05/05/2023, 09:46:05	F44-Lab
6038980	Enocan-PIRSensor02	occupancy	05/05/2023, 09:45:53	F44-Office
6038979	RKSUK01-Office-PIR01	motion	05/05/2023, 09:45:51	F44-Office
6038978	BLE-PIR01	occupancy	05/05/2023, 09:45:50	F44-Office
6038977	BLE-PIR02	occupancy	05/05/2023, 09:45:50	F44-Office
6038975	RKSUK01-Office-PIR01	motion	05/05/2023, 09:45:33	F44-Office
6038974	Enocan-DoorMultiSensor01	contact	05/05/2023, 09:45:33	F44-Office
6038972	Enocan-PIRSensor02	occupancy	05/05/2023, 09:44:53	F44-Office
6038971	BLE-PIR02	occupancy	05/05/2023, 09:44:50	F44-Office
6038970	BLE-PIR01	occupancy	05/05/2023, 09:44:50	F44-Office

Location: RKSUK01 - Office
 Event ID: 6038999
 Camera: F44-Office
 Device: Enocan-DoorMultiSensor01
 value: closed
 Comment: Office Enocan-DoorMultiSensor01 Event from Insights2.0 Service

Search...

F44-Office



1X
 ⏮
⏪
⏩
⏭
9:44:00
9:45:00
9:46:00
9:47:00
9:48:00
9:49:00
9:50:00
9:51:00

May 5 9:47:30 LIVE

▶ Playback Video
 ■ End Playback Video

HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓	✓	✓	✓	✓	✓	✓	✓

Occupancy

Space Occupancy/Utilization

- Space Utilization Rates
- Radio Technology Agnostic
 - BLE, Zigbee, LoRa
- Historical Data Recall/Analysis
- Integrated Interactive Floorplans
- Peak, Average, Low Time views
- Live Zone Status
- Workday Occupancy Analysis

“Use Low-Cost Sensors to Identify Busy Zones & Areas in Buildings to plan Service level Schedules”



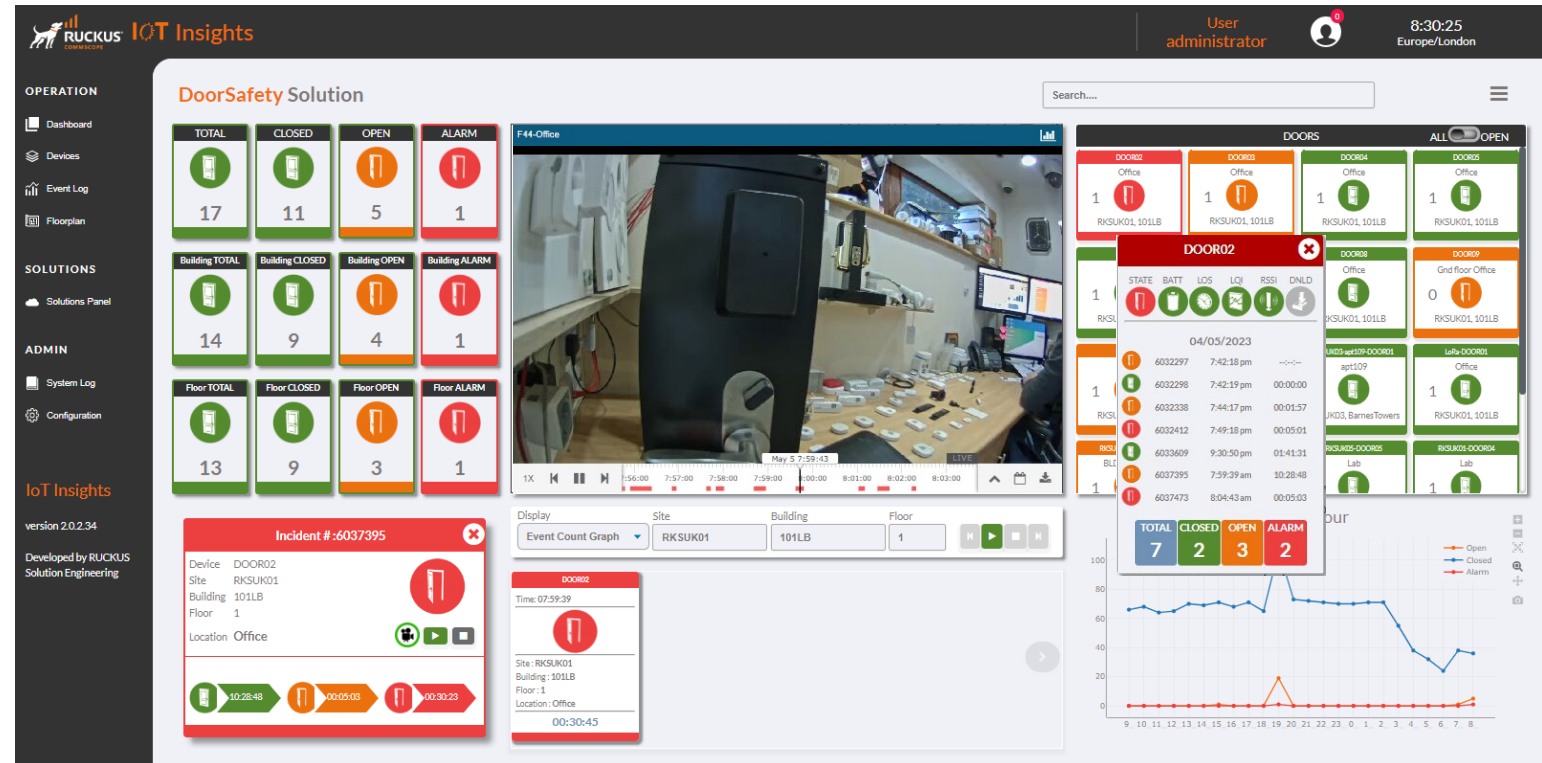
HSP	SMB	K-12	EDU	MDU	MED	IND	FED
	✓	✓	✓				

Door Safety

Door Alarm Monitoring

- Door / Fire Door State Monitor
- Radio Technology Agnostic
- Floorplan Integration
- Video Event Recall
- Alarm Count Auditing
- Historical State Reporting
- Live State Panel + device History

Use Magnetics Door Contact Sensors to guarantee Regulatory Compliance to Identify Isolate & mitigate repeat locations/actors



HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓	✓	✓	✓	✓	✓		✓



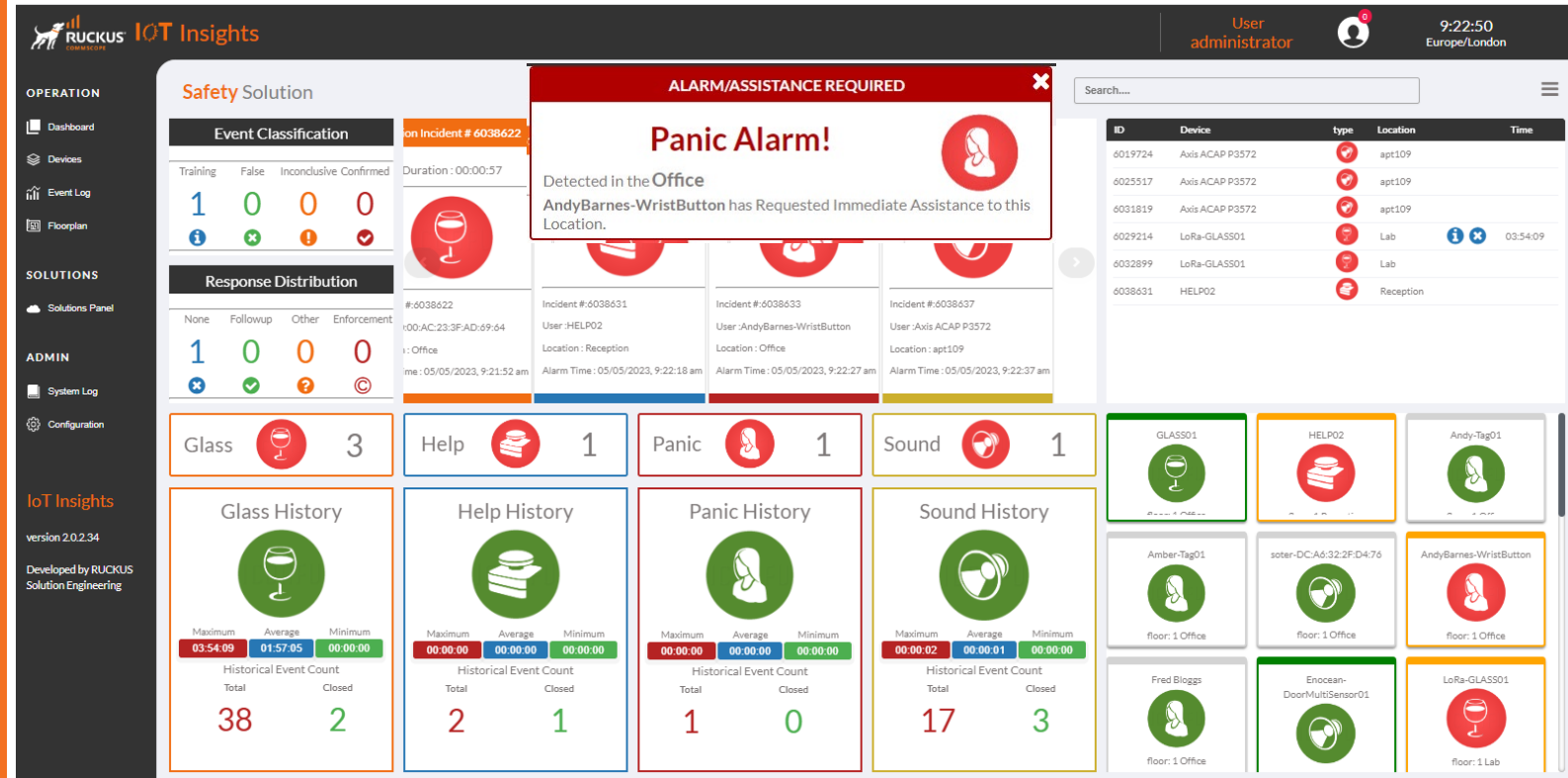
Staff Safety

Panic and Safety Assistance

- Monitor Alarms and Help Alerts
- Radio Technology Agnostic
 - BLE/Staff Panic Buttons/Tags
 - Fixed Help/Pull cords
 - Audio/Sound Event Triggers
 - Vibration/Glass Break Detection
- Statistics and Event Audit tracking
- Realtime Notification and Tracking

Workplace Safety / Assisted Living
Notification alert system

“provide remote or unattended Event
Activation and Monitoring”



HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓			✓	✓	✓	✓	

Location Services

Asset Tracking and Monitoring

- Monitor and Location Assets
- Identify Alarm Conditions
 - Panic Button/Help Events
 - Geofence Conditions
 - Restricted Access Leave/Enter
 - Sensor Health
- Integrated Notifications mail/SMS
- Standard 3rd Party HW Support
- Location and Event Analytics
- Map and Floorplan Integration

Commercially Available BLE tags can track goods/equipment/people throughout the Building ensuring Compliance and Safety in the Workplace



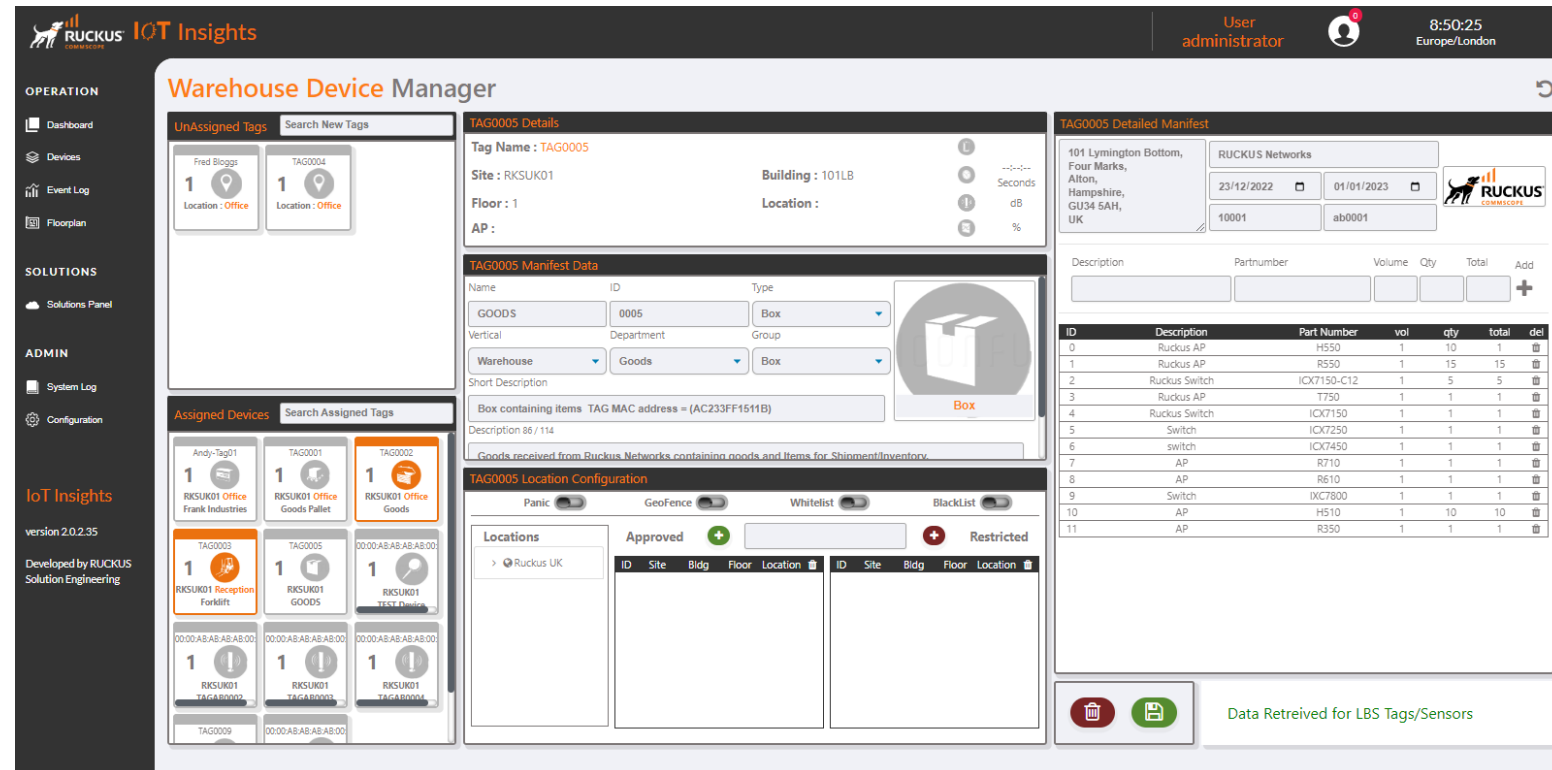
HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓	✓		✓	✓	✓	✓	✓

Warehouse admin

Manage and Configure BLE Tags

- Manage BLE Tags for Warehouse
 - Assign TAG to User
 - Assign TAG Operation
 - Label/Icon for TAG
 - Add Rules Geofence/Panic/Zones
- Create Manifest
 - Supplier/Date/Serial
 - Add Contents/Line Items
- Provide User Configurable Fields
- Fully Intgrted into LBS Solution

“Provide easy Customization of Assets within a wider Location Platform for Data Recall and Visualization”

Warehouse Device Manager

UnAssigned Tags Search New Tags

Assigned Devices Search Assigned Tags

TAG0005 Details

Tag Name : TAG0005
 Site : RKSUK01
 Building : 101LB
 Floor : 1
 Location :
 AP :
 Seconds
 dB
 %

TAG0005 Manifest Data

Name : GOODS ID : 0005 Type : Box
 Vertical : Warehouse Department : Goods Group : Box
 Short Description : Box containing items TAG MAC address = (AC233FF1511B)
 Description 86 / 114
 Goods received from Ruckus Networks containing goods and items for ShipmentInventory

TAG0005 Location Configuration

Panic: [Off] Geofence: [Off] Whitelist: [Off] Blacklist: [Off]

Locations

Approved: [Ruckus UK] Restricted: []

TAG0005 Detailed Manifest

101 Lymington Bottom, Four Marks, Alton, Hampshire, GU34 5AH, UK
 RUCKUS Networks
 23/12/2022 01/01/2023
 10001 ab0001

ID	Description	Part Number	vol	qty	total	del
0	Ruckus AP	H550	1	10	1	
1	Ruckus AP	R550	1	15	15	
2	Ruckus Switch	IOX7150-C12	1	5	5	
3	Ruckus AP	T750	1	1	1	
4	Ruckus Switch	IOX7150	1	1	1	
5	Switch	IOX7250	1	1	1	
6	switch	IOX7450	1	1	1	
7	AP	R710	1	1	1	
8	AP	R610	1	1	1	
9	Switch	IOX7800	1	1	1	
10	AP	H510	1	10	10	
11	AP	R350	1	1	1	

Data Retrieved for LBS Tags/Sensors

HSP	SMB	K-12	EDU	MDU	MED	IND	FED
						✓	✓

Building Services

Monitor & Understand Building Usage

- Review Building Energy Usage
- Location Based Data Recovery
- Predict Forward Trends
- Identify Waste/Underutilization
- Realtime Building Oversight
 - Align Occupancy with Usage Data
 - Identify Poor Air Quality Events
 - Capitalize on Energy Savings and Efficiency

“Easily Identify Efficiencies and Cost Savings through Multi Network Data Alignment”. Bring Sensor Data from any network and x-reference for savings



HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓	✓		✓	✓	✓	✓	✓

Battery Manager

Reporting for Bettary Managment

- Device Overview
 - List all Devices and Their Current State
 - Identify Actionable Devices
 - Categorize Future Actions
- Run Maintenance Reports
 - Actions for Now, Soon, No Action
- Export to PDF/Report
- Configurable
 - Add your own Battery Types
 - Add your Own Devices
 - Associate Batteries & Devices




IoT Insights

User administrator  8:38:18 Europe/London

OPERATION

- Dashboard
- Devices
- Event Log
- Floorplan

SOLUTIONS

- Solutions Panel

ADMIN

- System Log
- Configuration

Battery Manager Solution

Device Battery Alarms									
ID	Device Name	Manufacturer	Model	Device ID	Location	Battery	Level	Alarm	Action
101	DormaKaba	SafLok	SP 222	RKSUKD1	101LB	1	Office	AA	3
POWER01	Innr	SP 222	RKSUKD1	101LB	1	Office	AA	3	---
DOOR02	Samjin	multi	RKSUKD1	101LB	1	Office	CR2450	1	60%
DOOR03	Samjin	multi	RKSUKD1	101LB	1	Office	CR2450	1	57%
DOOR04	ClimaxTechnology	DC_00.00.03.12TC	RKSUKD1	101LB	1	Office	CR2	1	---
DOOR05	ClimaxTechnology	DC_00.00.03.12TC	RKSUKD1	101LB	1	Office	CR2	1	---
DOOR06	ClimaxTechnology	DC_00.00.03.12TC	RKSUKD1	101LB	1	Office	CR2	1	---
DOOR07	TUYATEC-Phgssol	RH3001	RKSUKD1	101LB	1	Office	CR2450	1	92%
DOOR08	ADUROUGHT	CSW_ADUROUGHT	RKSUKD1	101LB	1	Office	CR2032	1	95%
DOOR09	LUMI	lumi.sensor_magnet.aq2	RKSUKD1	101LB	0	Grnd floor Office	CR1632	1	---
DIO01	ClimaxTechnology	DIO50_00.00.03.12TC	RKSUKD1	101LB	1	Office	CR2	1	---
LED01	3A Smart Home DE	LXT56-LS27LXL1.6	RKSUKD1	101LB	1	Office	---	---	---
LED02	3A Smart Home DE	LXT56-LS27LXL1.7	RKSUKD1	101LB	1	Office	---	---	---
RM104	AssaAbloy	VingCard	RKSUKD1	101LB	1	Office	AA	3	---
WATER01	Samjin	water	RKSUKD1	101LB	1	Office	CR2	1	100%
RKSUK02-WATER01	Samjin	water	RKSUKD1	101LB	1	Office	CR2	1	71%
ReceptionCO2	Titan Products Ltd	TP2RCO2HT-Z3	RKSUKD1	101LB	1	Reception	LS14500	1	---
OfficePressure	LUMI	lumi.weather	RKSUKD1	101LB	1	Office	CR2032	1	---
GLASS01	ClimaxTechnology	SVG53_00.00.03.09TC	RKSUKD1	101LB	1	Office	CR2477	1	---
HELPO2	ClimaxTechnology	PCUS_00.00.03.01TC	RKSUKD1	101LB	1	Reception	CR2	1	---
OfficeLights01	Jasco Products	45856	RKSUKD1	101LB	1	Office	---	---	---
BUTTON01	Samjin	button	RKSUKD1	101LB	1	Office	CR2450	1	71%
RKSUK01-Office-PIR01	Samjin	motion	RKSUKD1	101LB	1	Office	CR2	1	81%
CICHTHERMO01	TelikeNet	TouchFlex	RKSUKD1	101LB	1	Corridor	---	---	---
RKSUK02-Office-WATER...	HEIMAN	WaterSensor-EM	RKSUK02	Test Home	1	Lab	AA	2	---

Search...

3

1

33

107

Insights Battery Report

RUCKUS IoT Insights Device Battery Report

Devices Needing Batteries Replacing/Charging

Device Name	Manufacturer	Model	net	Site	Building	Location	Battery	#	%	
EnOcean-CoopMultiSe...	EnOcean GmbH	STM 550B	0	RKSUK01	101LB	1	Office	Solar	0	0%
TAG20006	Apple, Inc.	BLE Sensor	0	RKSUK01	101LB	1	Office	---	18%	
TAG20009	Apple, Inc.	BLE Sensor	0	RKSUK01	101LB	1	Lab	---	12%	

Devices That will need Batteries Changing Soon

Device Name	Manufacturer	Model	net	Site	Building	Location	Battery	#	%	
apt10F-LOCK	Yale	YRD220 340 T3DB	0	RKSUK02	BarnesTowers	1	apt10F	AA	4	44%

Devices Not of Concern

Device Name	Manufacturer	Model	net	Site	Building	Location	Battery	#	%	
DOOR02	Samjin	multi	0	RKSUK01	101LB	1	Office	CR2450	1	60%
DOOR03	Samjin	multi	0	RKSUK01	101LB	1	Office	CR2450	1	57%
DOOR07	TUYATEC-Phgssol	RH3001	0	RKSUK01	101LB	1	Office	CR2450	1	92%
DOOR08	ADUROUGHT	CSW_ADUROUGHT	0	RKSUK01	101LB	1	Office	CR2032	1	95%
WATER01	Samjin	water	0	RKSUK01	101LB	1	Office	CR2	1	100%
RKSUK02-WATER01	Samjin	water	0	RKSUK01	101LB	1	Office	CR2	1	71%
BUTTON01	Samjin	button	0	RKSUK01	101LB	1	Office	CR2450	1	71%
RKSUK01-Office-PIR02	Samjin	motion	0	RKSUK01	101LB	1	Office	CR2	1	81%
And-BarnesWinBul...	Apple, Inc.	BLE Sensor	0	RKSUK01	101LB	1	Office	---	60%	
DOOR01	Samjin	multi	0	RKSUK01	101LB	1	Office	CR2450	1	62%
BLE-Eniro01	rigado	SL_Sensor	0	RKSUK01	101LB	1	Office	NFR	0	100%
BLE-PIR01	rigado	RS40_Occupancy_Sen...	0	RKSUK01	101LB	1	Office	NFR	0	82%
BLE-PIR02	rigado	RS40_Occupancy_Sen...	0	RKSUK01	101LB	1	Office	NFR	0	92%
EnOcean-PIR02	EnOcean GmbH	ENOCB	0	RKSUK01	101LB	1	Office	Solar	0	99%
RKSUK02-apt10F-PL...	Philips	SHL001	0	RKSUK02	BarnesTowers	1	apt10F	AAA	2	100%
RKSUK02-apt10F-D...	Samjin	multi	0	RKSUK02	BarnesTowers	1	apt10F	CR2450	1	89%
LoRa-GLASS01	NETVOX	R718	0	RKSUK01	101LB	1	Lab	LS14500	1	100%
LoRa-Temperature01	NETVOX	R711	0	RKSUK01	101LB	1	Office	AA	2	100%
RKSUK02-DOOR-01	rigado	nlwe-d4	0	RKSUK02	BL001	1	BL001-Office	NFR	0	80%
TAG20001	Apple, Inc.	BLE Sensor	0	RKSUK01	101LB	1	Office	---	100%	

“Manage your IoT Sensor Network and Schedule Maintenance Work easily”

HSP	SMB	K-12	EDU	MDU	MED	IND	FED
✓	✓	✓	✓	✓	✓	✓	✓

Value Proposition

Hospitality – Online Locks – AssaAbloy

Problem Statement

Hotel Door Locks Traditionally were not connected resulting in a lack of vision and monitoring of Guest Rooms and Reduced security from a guest perspective. Wandering Intruders and lost key cards resulted in complications for Room and Lock management. Migration of Locks to an online and always connected mode helps to address these problems as well as providing real time audit of access and door state indication and Alarm Monitoring.

Solution Overview

The Development of Online Wireless connected Door locks and Door access Control Management Systems from AssaAbloy Hospitality Services with their VingCard and Visionline Server allows Doors to be online connected and monitored/Reprogrammed/managed 24/7 through the Proprietary Zigbee Network Interface. The Visionline/VingCard System allows Hotels to monitor, Manage/Re-program and disable Guest Cards on the fly and in Real time all from a central management portal.

Combined Offering

The Integration of the AssaAbloy Zigbee Radio Protocol and Api Interface to the VisionLine server allows the onboarding and management of all AssaAbloy Hospitality Door Locks to be transported through the RUCKSU IoT Network ec-system. Locks can be connected to any RUCKUS IoT AP and all traffic is seamlessly connected to the VisionLine Server in a secure and compartmentalized Network ensuring low latency end to end Lock/Service Communication with measurable KPI's and Service Levels

ASSA ABLOY

Competitive Solutions

dormakaba

SALTO

inspiredaccess

HOISTGROUP

STANLEY

North America

Latin America

Europe

MEA

Asia/Pacific

Value Proposition

RUCKUS & AssaAbloy Integrated Solution provides a secure end to end connection between the Door Lock and the Management Server. The Radio Level integration and Secure Server interfaces ensure data privacy secure transportation and real time low latency transfer between endpoints.

This Integration ensures high reliability compartmentalized Traffic routing end to end encryption and an overall cost savings for Installations and deployments that continue to scale as the property grows or increases its connected services. The Integration allows for multiple Door Locks the be connected to each Access point where a property may be providing a more universal WiFi Coverage or on a 1:1 mapping in installations where an AP may be deployed on a per room Basis.

The removal of AssaAbloy Gateways reduces the complexity of Deployment and operation of the Door lock system ensuring KPI/Performance metrics and allowing for fewer system Software management actions and an overall reduction in edge devices that need to be managed and monitored as part of the overall network infrastructure.

Online Locks (Assumes 4 Locks Per GW)

Gateway Cost	\$200	Gateway HW Cost	\$25,000
Installation Cost	\$200	Gateway Install Cost	\$25,000
# of Rooms	500	**Switch Cost	\$9,000



Solution Brief



Deployment Guide



Customer Reference

\$59,000

Cost per installation based on a 500 Room Installation vs overlay on RUCKUS IoT

Hospitality – Panic Button -TraknProtect

Problem Statement

US Regulation Requires Hotels above determined Size to provide ALL Members of Staff entering A Guest Area/Room to provide an Emergency Assistance Notification request system. This system must provide 24/7 monitoring and call Assistance while maintain the Operators Individual Rights to Privacy. The System Must provide Remote Call Assistance while ensuring Local Union Agreements are Maintained and preserved while providing remote Monitoring and Notification.

Solution Overview

Provide a single Network that can monitor a Staff Members location & provide Room Level Accuracy in the Event a Button/Tag is Activated. No location data is tracked in Real time the System will indicate if the position moves only AFTER an event is Triggered. A solution will provide SMS/Text + e-mail notification to Security/Mgmnt & can provide application-level notice/monitoring for Staff/Security and Mgmnt for auditing purposes and Event/Action Follow up.

Combined Offering

RUCKUS & TnP Combine to provide a custom Solution for Staff Safety Panic Button Integration, The solution utilizes the RUCKUS IoT Enabled AP + IOT controller and the TnP Tags & Cloud Deployed Service, RUCKUS provides TnP Services with the Location (Lat/Lng/name) of the Reporting AP and the ID of the TnP Tag in Use. This Data is then Relayed Securely to the TnP Cloud for Notification/Logging & KPI Measurement for the Customer. The Combine Offering ensures a lower cost and high reliability of Service to meet the needs of the Regulation and legal obligations

Competitive Solutions



North America

Latin America

Europe

MEA

Asia/Pacific

Value Proposition

RUCKUS & TraknProtect Combined IoT Bluetooth Tracking Solution reduces Installation and ongoing Running costs improves long term stability and Service Guarantees while providing guaranteed peace of mind for Staff managers and operators alike.

A Single IoT Network installation allows for Reduced Cabling, No overlay Network Gateways and reduced Switching Infrastructure to provide BLE Panic Button Services. The Integration of TnP into the RUCKUS IoT Eco-System saves on HW Costs, Additional Cable Installation and Reoccurring Power costs for 3rd Party Gateways.

The Continued Software Support and RUCKUS Watchdog Software Maintenance ensures your IoT Network remains secure and up to date with a single Management interface for all Network Monitoring and Management

Additional Performance and Management Value provided by Offloading Traffic into Managed IoT VLAN, Improved Traffic Aggregation, single Network Managed KPI measurement and Monitoring.

Panic Buttons (Assumes 1 GW/Room)

Gateway Cost	\$56	Gateway HW Cost	\$28,000
Installation Cost	\$20	Gateway Install Cost	\$10,000
# of Rooms	500	** Switch Cost	\$0 



Solution Brief



Deployment Guide



Customer Reference

\$38,000

Cost per installation based on a 500 Room Installation vs overlay on RUCKUS IoT



TraknProtect

Hospitality – Energy Management – UEI

Problem Statement

Increasing Energy Costs and a Drive to lower Carbon emissions is forcing Operators to be more energy efficient and to understand where their energy is being used.

In Guest Room AC & Heating along with other high use appliances are major sources of excess energy in rooms, these costs are compounded in unoccupied or vacated rooms during the day and require a dynamic solution to reduce Energy usage based on Occupancy

Solution Overview

Having the Ability to connect Thermostats to an online Energy management and Monitoring system that can adjust the Settings based on Occupancy, Time of Day and real time external weather/environmental conditions. This approach ensures that a Rooms Energy usage is minimized and that the Environment is kept at a suitable level. Additional advantages include long term vacated properties are maintained within safe environmental conditions reducing bacterial& mould growth.

Combined Offering

The Integration of the EUI Connected Thermostats with the RUCKUS IoT Suite using a connected Zigbee Protocol allows for a simple fast onboarding and communication. This provides direct System level access to the Complete range of Device controls for a Guest Phone Application as well as System Management control and monitoring. The integration of the UEI Thermostat into the RUCKUS IoT Insights Platform and our Managed Services Building Solution ensures compatibility control and deep room level Insights and Reporting

Competitive Solutions



North America Latin America Europe MEA Asia/Pacific

Value Proposition

RUCKUS IoT Suite of Connected Zigbee Access Points and the UEI Range of Zigbee Enabled Thermostats with Integrated Occupancy and Door/Window Monitoring Sensors allows for Easy Deployment and Real time Energy management and Active Environmental control. When a door or window is open, or the Room is Un-occupied the System can automatically turn off and minimize wastage. Additionally, the Network connection allows for full Data Integration and real time monitoring of all Thermostat states and Live/Historical data recall for reporting, analysis and Profiling. Combining the UEI Thermostat and RUCKUS IOT controller with the UEI Range of Connected Services the property manager has a higher level of data for managing monitoring and interacting with the properties energy Usage and to ensure that the Building is operating at peak efficiency.

With the Combined solution it is possible to provide real Energy Savings on a per room level and to ensure a reduction of Co2 Emissions for the Building. Additionally, the UEI range of connected devices provide direct mobile phone management and monitoring for Guests and property owners while providing universal access via API's for 3rd party Integration and Data Analysis.

Thermostats (Assumes 11 Thermostats per GW)

Gateway Cost	\$250	Gateway HW Cost	\$11,250
Installation Cost	\$200	Gateway Install Cost	\$9,000
# of Rooms	500	**Switch Cost	\$3,000



Solution Brief



Deployment Guide

\$23,250

Cost per installation based on a 500 Room Installation vs overlay on RUCKUS IoT

Hospitality – RUCKUS IoT

Example Deployment

A Hotel Operator wants to Deploy RUCKUS WiFi in all rooms and common areas. They also are going to Deploy AssaAbloy Door Locks using the Visionline Server in each Property. They are considering using AA Gateways and connecting them to the Server using Ethernet and POE Switches. They have costed the AA solution and the WiFi Solution but want to understand what savings we can provide them and additional Future upgrade/Savings they can get should they decide to add Panic/Energy management in the future.

Let's look at the Costs for this Requirement & future enhancements....

RUCKUS Solution

IoT Controller	\$497	Instance License	\$1361
Device Licenses	\$17,850	System Cost	\$19,708

AA Solution

Gateway HW Cost	\$25,000	Gateway Install Cost	\$25,000
Switch Cost	\$9,000	Solution cost	\$59,000

TnP Solution

Gateway HW Cost	\$28,000	Gateway Install Cost	\$10,000
Switch Cost	\$0	Solution cost	\$38,000

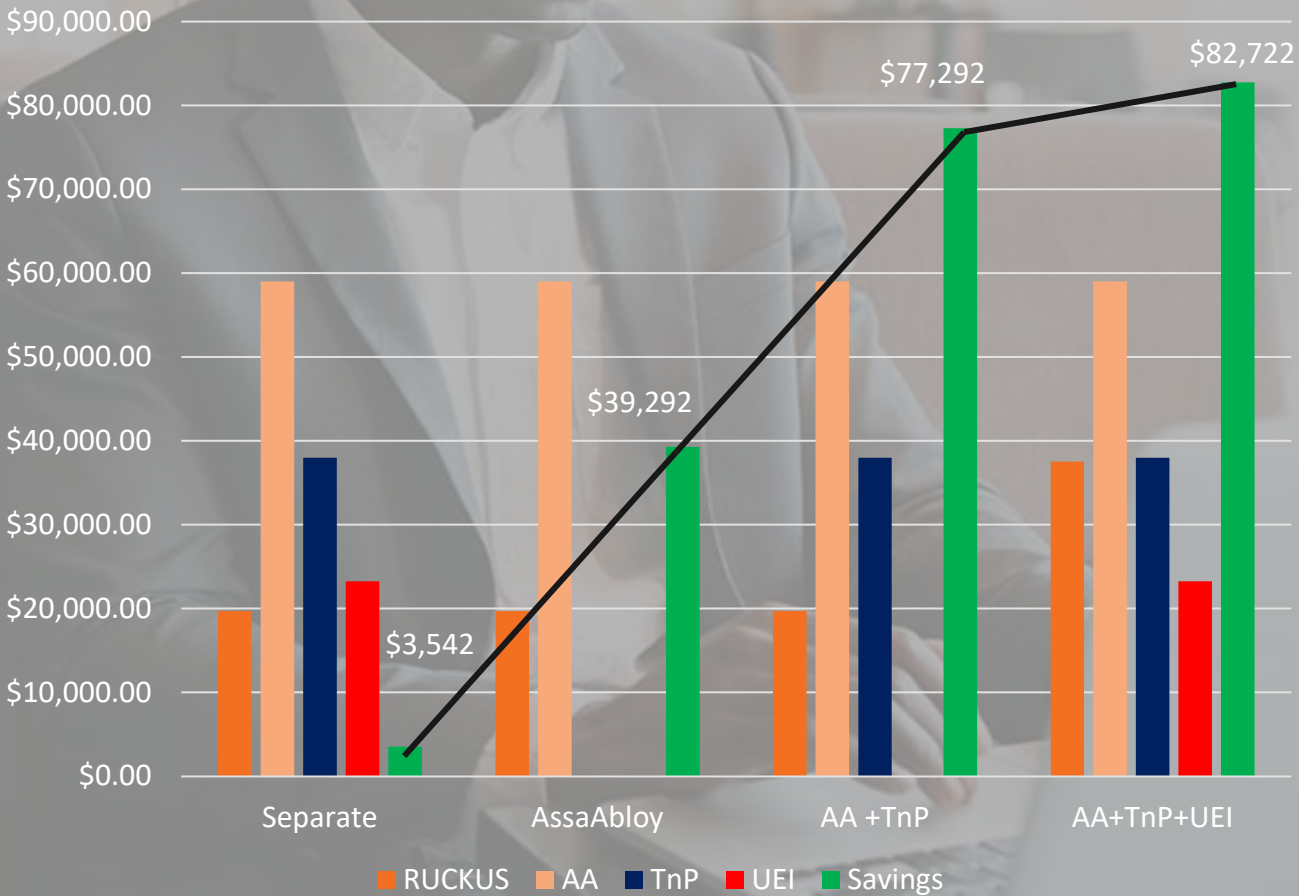
UEI Solution

Gateway HW Cost	\$11,250	Gateway Install Cost	\$9,000
Switch Cost	\$3,000	Solution cost	\$23,250

Don't Forget IoT

WiFi and Switching may be the Larger part of the Initial Revenue but IoT is the Differentiator, IoT Returns Material Benefits for the Operator of the Property. The Integrations provide easy add on Services and future proof the building, additionally the upgrade to RUCKUS-One ensures easy upgrade and new services can be deployed from the Cloud with a subscription only Upgrade. Solutions and Services can be upgraded at any time once the eco-system is installed greatly reducing the cost of adding incremental services once the initial solution has been deployed.

Solution Cost Comparison





PURPOSE-DRIVEN ENTERPRISE NETWORKS

IoT Demonstration

RUCKUS ICX and Wan Gateway

Mario Socarras, RUCKUS SE Manager UK & I



RUCKUS Wired Portfolio Update

Evolution in LAN and WAN

06th July 2023

Mario Socarras

RUCKUS SE Manager - UKI



TM
TM

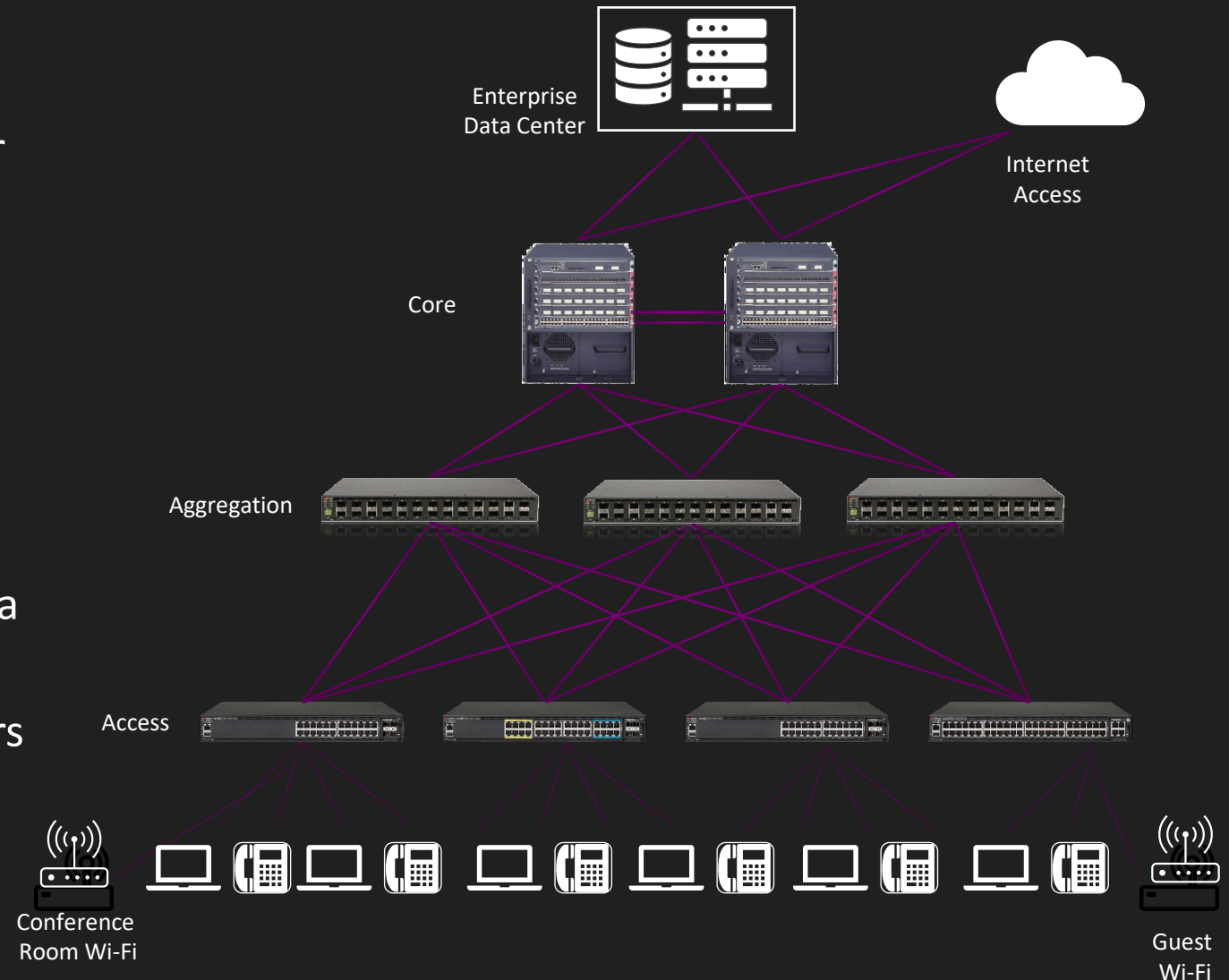
ICX



PURPOSE-DRIVEN ENTERPRISE NETWORKS

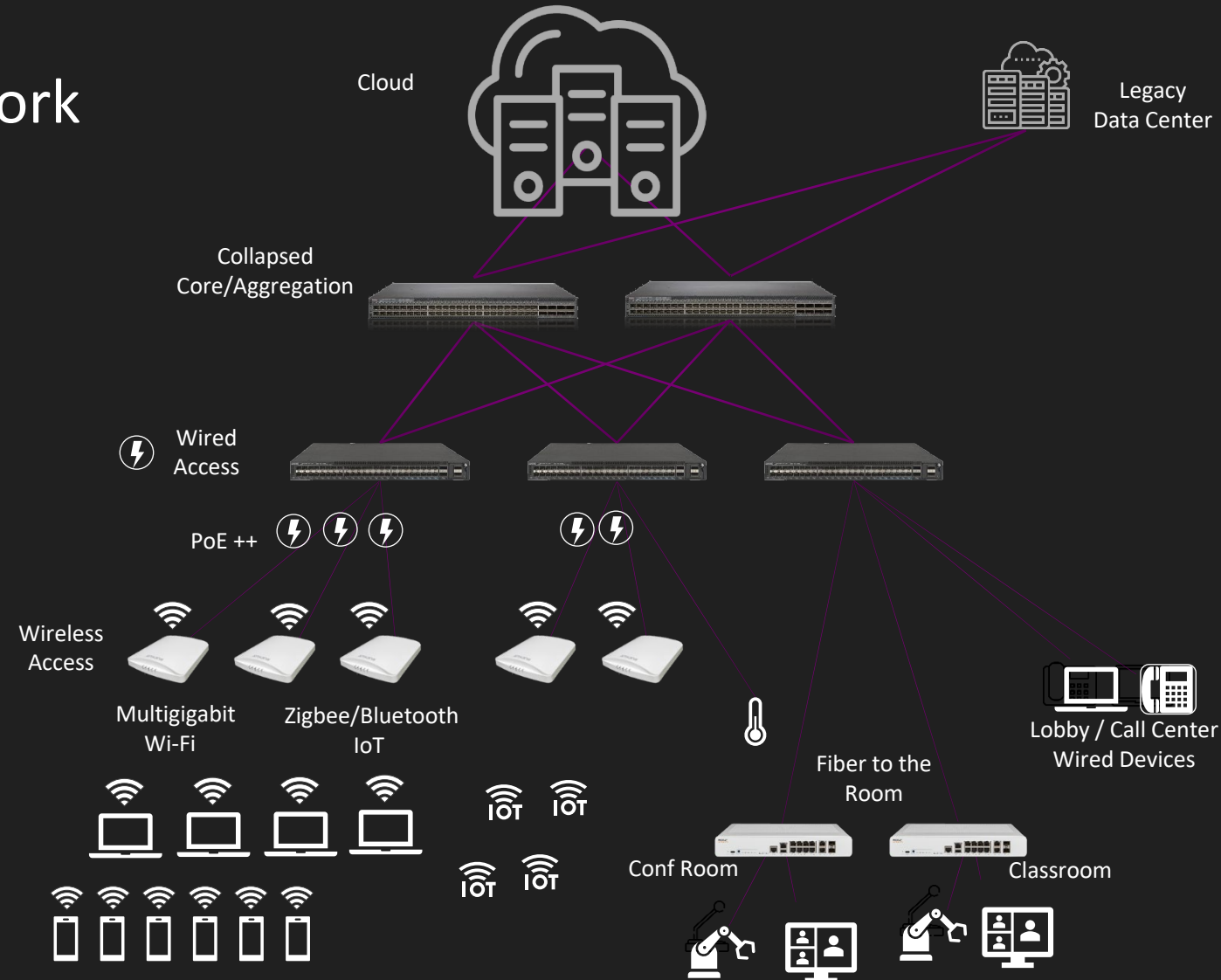
Traditional “Old World” Wired First Campus

- **Legacy Campus Network**
- Optimized for wired access to data center applications and VoIP desk phones
- 3 Tier hierarchical design
- Wired access layer for VoIP phones, Laptop/Desktop. Data VLAN, Voice VLAN
- Wireless access for guest and conference rooms, few APs
- Core connects primarily to enterprise data center. “internet access” is a service
- Many wired ports, not a lot of traffic/users per port

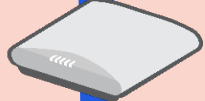
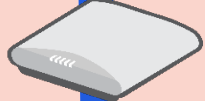


New World” Wireless First & IoT Campus

- Next Generation Campus Network
- Optimized for wireless access to applications running in the cloud
- Designed for flex work, guest offices/cube, little pre-assigned spaces, no docking stations
- Laptops, tablets, phones connect wirelessly over Wi-Fi
- Many wired and wireless IoT devices
- Wired access layer aggregates wireless traffic, optimized for AP connectivity needs
- Compact switches for conference room equipment/classroom



High Performance Devices are High Power

Standard	Power at Switch	802.11a/n	802.11ac	Wi-Fi 6	Wi-Fi 6E/7	Other Powered Devices
PoE 802.3af	15W					
PoE+ 802.3at	30W					
PoE++ 802.3bt	60W					
High-Power 802.3bt	90W					 

Multigigabit Ethernet & POE on Wi-Fi 6 & 6E RUCKUS APs



2.5 / 5 / 10 GbE	2.5 / 5 GbE		2.5 GbE	
R760	R850	R560	R750	R650
				
Wi-Fi 6E	Wi-Fi 6	Wi-Fi 6E	Wi-Fi 6	Wi-Fi 6
LLDP Request 40W (.3bt required for full functionality)	35W (.3bt required for full functionality)	40W (.3bt required for full functionality)	< 30W (.3bt not required for full functionality)	< 30W (.3bt not required for full functionality)

Wi-Fi 7



In Case You've Missed It: Introducing ICX 8200

Advanced Functionality

- 25GbE SFP28 Uplinks
- VXLAN
- More L3 Features

High Value Features Included

- Stacking 10G or 25G
- 3 Years TAC Support
- TAA Compliant

Comprehensive Line Up

- 13 Models
- More MGig, Dual PSU,
1GbE Fiber, 10GbE Fiber



Gigabit Access Switches – Shipping Since Q1

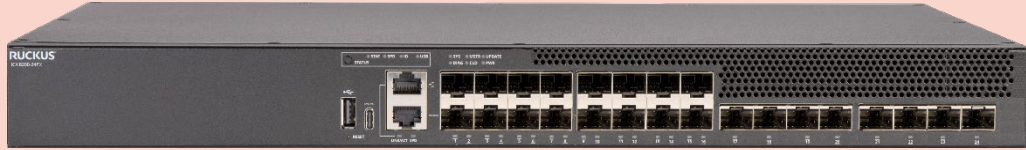


Part Number, Description	Port Configuration	
ICX8200-24 24 Port	24x 10/100/1000 4x 1/10/25GbE SFP28	
ICX8200-48 48 Port	48x 10/100/1000 4x 1/10/25GbE SFP28	
ICX8200-24P 24 Port PoE	24x 10/100/1000 802.3at Class 4 PoE, 370W budget 4x 1/10/25GbE SFP28	
ICX8200-48P 48 Port PoE	48x 10/100/1000 802.3at Class 4 PoE, 370W budget 4x 1/10/25GbE SFP28	
ICX8200-48PF 48 Port PoE Double Budget	48x 10/100/1000 802.3at Class 4 PoE, 740W budget 4x 1/10/25GbE SFP28	
ICX8200-48PF2-E 48 Port PoE Dual FRU PSU & Fan (with 1 PSU & Fan)	48x 10/100/1000 802.3at Class 4 PoE, 740W budget 4x 1/10/25GbE SFP28	
ICX8200-48PF2-E2 48 Port PoE Dual FRU PSU & Fan (with 2 PSU & Fan)	48x 10/100/1000 802.3at Class 4 PoE, 1440W budget 4x 1/10/25GbE SFP28	
ICX8200-C08PF 8 Port Compact PoE 10GE Uplink	8x 10/100/1000 802.3at Class 4 PoE, 124W budget 2x 1/10GbE SFP+	

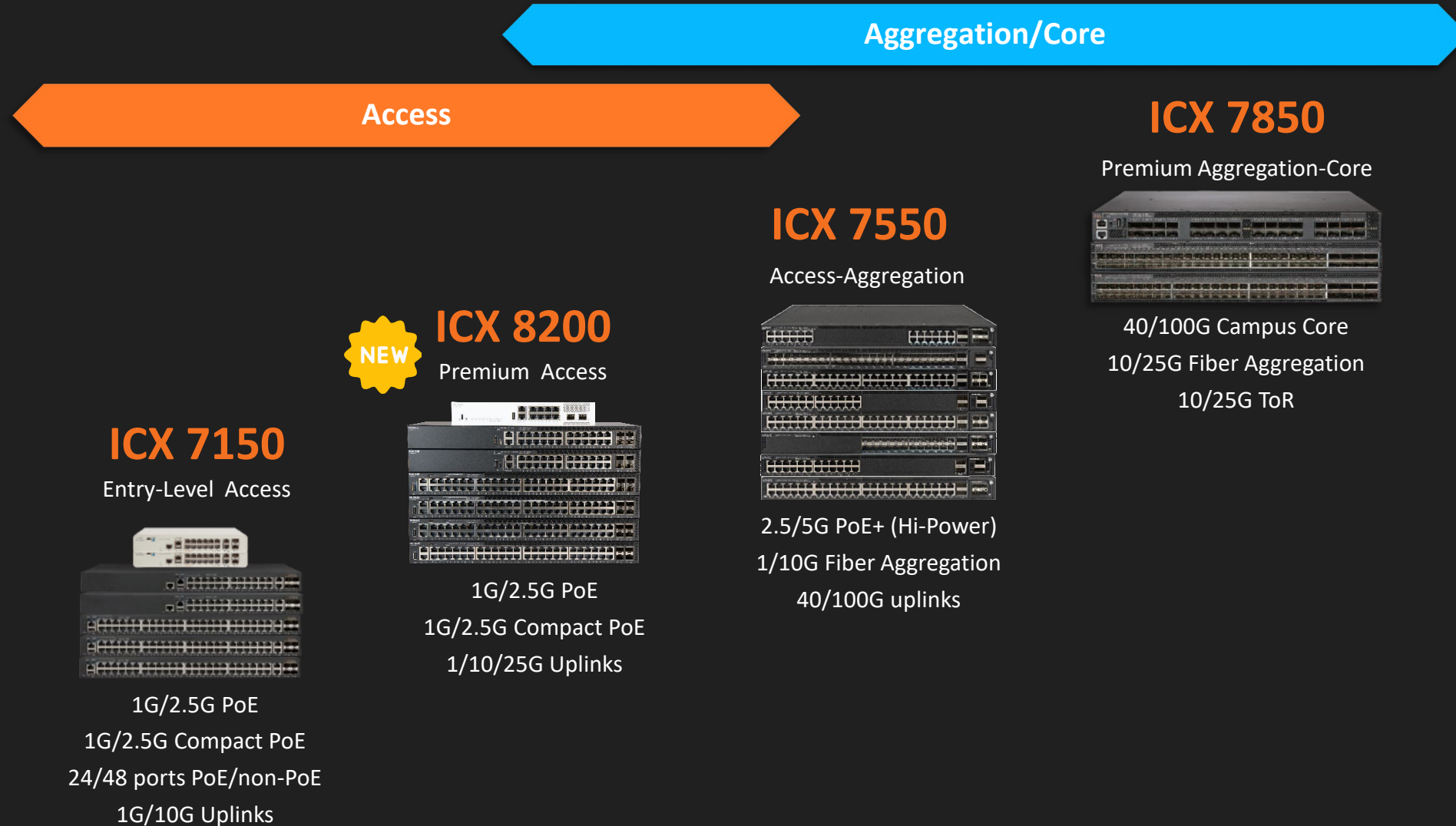
Multi Gigabit Access: Shipping now

Part Number, Description	Port Config	
ICX8200-24ZP 24 Port Multigigabit Ethernet PoE	24x 100/1000/2.5 802.3bt Class 8 PoE, 740W budget 4x 1/10/25GbE SFP28	
ICX8200-48ZP2-E 48 Port Multigigabit PoE Dual FRU PSU & Fan (with 1 PSU & Fan)	32x 10/100/1000 802.3at Class 4, 16x 100/1000/2.5 802.3bt Class 8 PoE, 740W budget 4x 1/10/25G SFP28	
ICX8200-48ZP2-E2 48 Port Multigigabit PoE Dual FRU PSU & Fan (with 2 PSU & Fan)	32x 10/100/1000 802.3at Class 4, 16x 100/1000/2.5 802.3bt Class 8 PoE, 1480W budget 4x 1/10/25G SFP28	
ICX8200-C08ZP 8 Port Compact Multigigabit PoE	4x 100/1000/2.5 802.3bt Class 8, 4x 1/2.5/5/10 802.3bt Class 8 PoE, 240W budget 2x 1/10/25GbE SFP28	

Fibre Switches: Shipping now

Part Number, Description	Port Config	
ICX8200-24F 24 Port 1GE Fiber	24x 1G SFP 4x 1/10/25GbE SFP28	 A black Ruckus ICX8200-24F switch with 24 SFP ports and 4 SFP28 ports.
ICX8200-48F 48 Port 1GE Fiber	48x 1G SFP 4x 1/10/25GbE SFP28	 A black Ruckus ICX8200-48F switch with 48 SFP ports and 4 SFP28 ports.
ICX8200-24FX 24 Port 10GE Fiber	16x 1/10G SFP+ 8x 1/10/25GbE SFP28	 A black Ruckus ICX8200-24FX switch with 16 SFP+ ports and 8 SFP28 ports.

ICX Switching Building Blocks

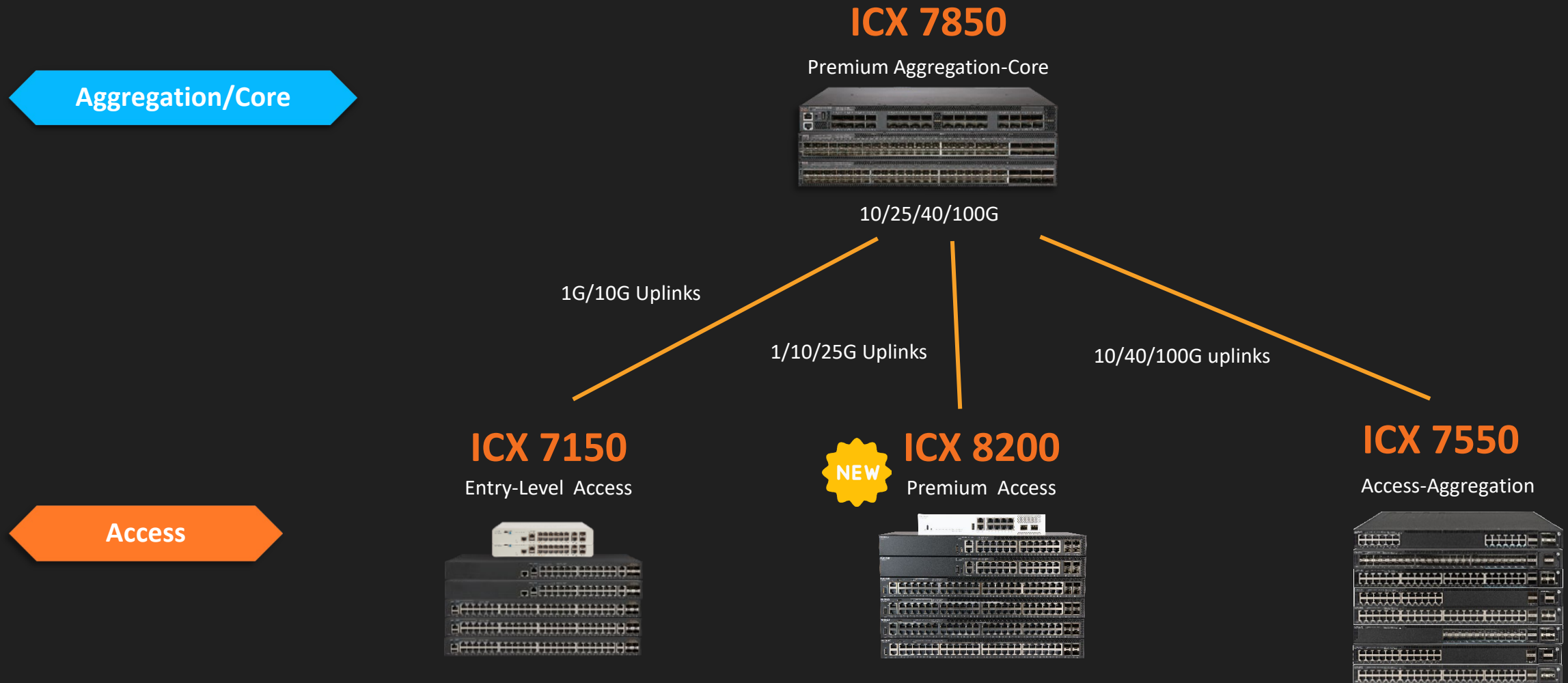


Access Port Speeds

	7150	8200	7550
1GbE RJ45	✓	✓	✓
2.5GbE RJ45	✓	✓	✓
5GbE RJ45			✓
10GbE RJ45			✓
1GbE SFP		✓	✓
10GbE SFP		✓	✓

Compact Switches Options May Vary

Uplink Speeds Options



RUCKUS ICX Stacking

Advanced stacking features using standard Ethernet ports

- Up to 12 units per stack
- Hitless stacking failover for HA
- Rolling ISSU for software updates
- Shortest path and redundant links for efficient and reliable traffic flow
- Flexible deployment options - 0.5m to 10km between Switches
- Standards-based dual-purpose data/stacking ports use standard Ethernet connectivity
- Multiple 10G, 40G or 100G links depending on the platform



Why Do You Care?

- Greater scalability
- Reduced costs
 - Stacking cables
 - Stacking modules/licenses
- Simpler management
- Flexible deployment
- High availability

Hardware Redundancy



Consider

PSUs

Fan Trays

How Swapping

Hardware Redundancy



Consider
PSUs
Fan Trays
How Swapping

Manage Your Network As You Prefer

RUCKUS Control & Management

Physical Appliance



SmartZone

Virtual Appliance



SmartZone
SZ 5.1+



RUCKUS Cloud



RUCKUS ONE



RUCKUS Unleashed



RUCKUS Analytics

Tools Supported

RESTCONF

Ansible Playbook

Web UI

CLI

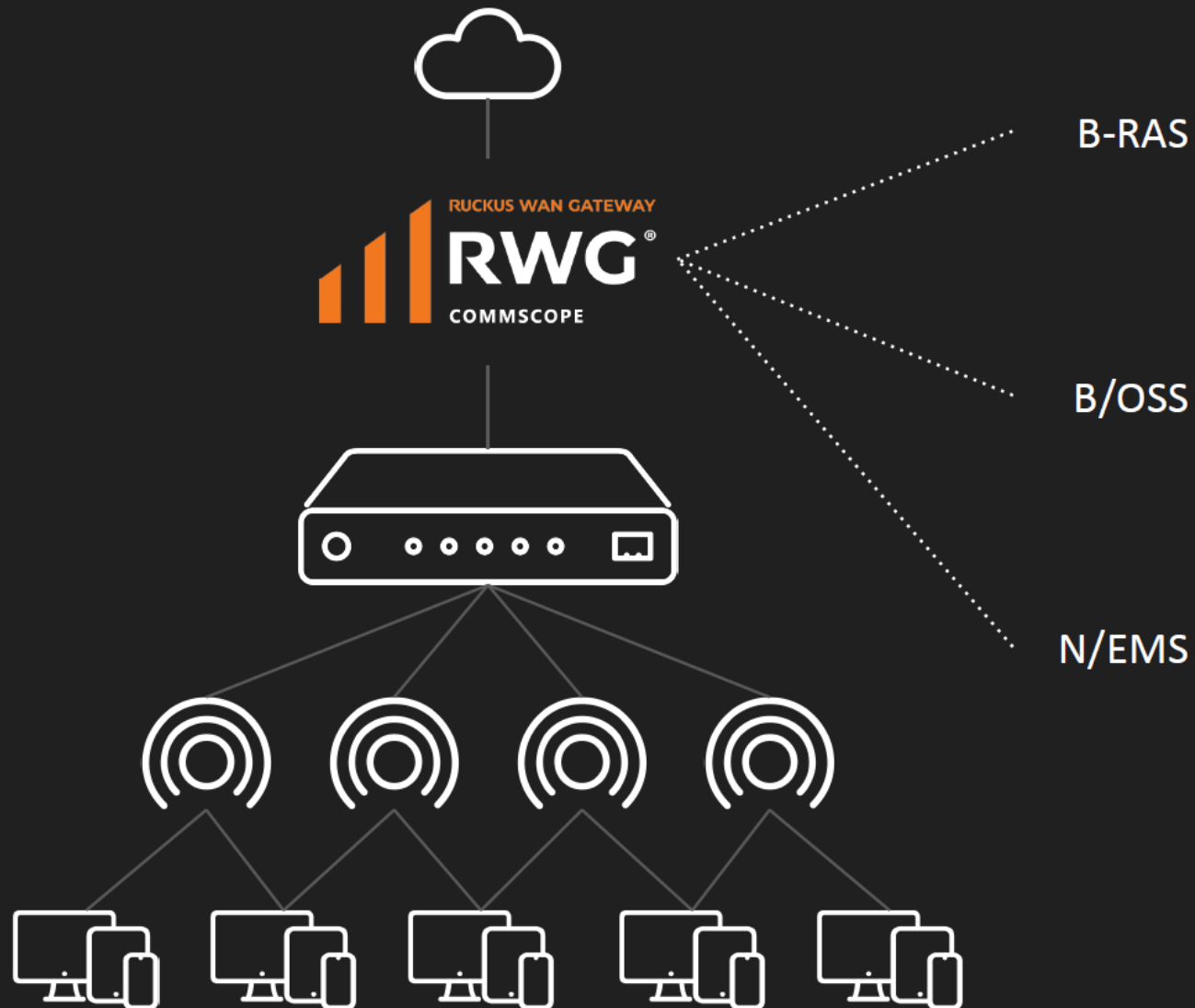
SNMP

Edge Updates



PURPOSE-DRIVEN
ENTERPRISE NETWORKS

Purpose Built Edge Gateway



DATA PLANE

- Routing
- Micro segmentation
- SDWAN
- cgNAT
- Traffic Shaping
- DHCP
- DNS
- BNG / BGP
- Portal

CONTROL PLANE

- Instant Subscriber Self-provisioning
- Billing
- Venue self-service management
- NAC
- Location Services

MANAGEMENT PLANE

- Wireline & Wireless autoconfiguration
- Test & Measurement automation
- Reporting

A complete arsenal of integrated network functions, collapsed into a single hyper-connected platform

Typical Verticals for RWG



LPVs

- rapid onboarding, at scale
- location based monetization
- fair share equalization
- traffic shaping



MDUs

- micro-segmented VLANs
- PMS generated eDPSKs
- zero touch (no truck roll)
- best tenant experience vRG



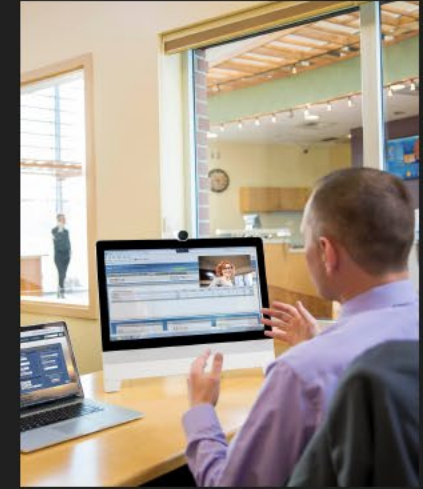
Airports

- digital signage
- location based services
- neutral host SD-WAN



Resorts

- secure guest network
- dynamic PSKs
- automated PANs
- ZTNA back office



SMB / Retail

- managed services
- fleet manager
- SD-WAN neutral host
- traffic shaping

All In One Solution



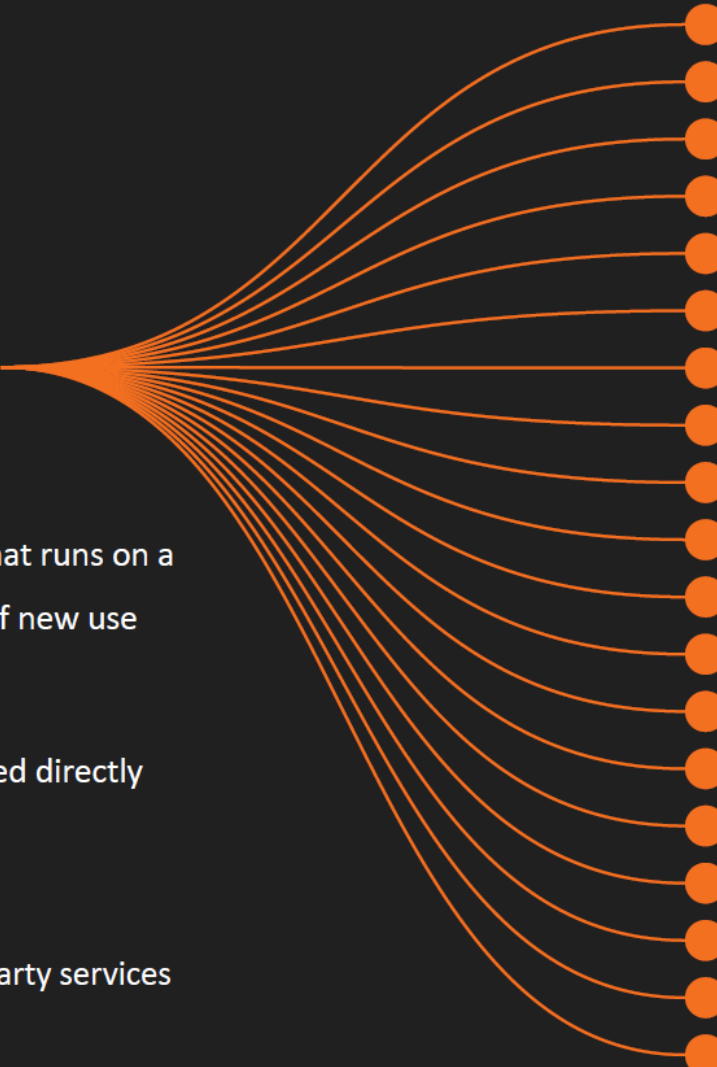
A fully-featured, integrated software suite that runs on a single server that enables rapid realization of new use cases and user experiences.



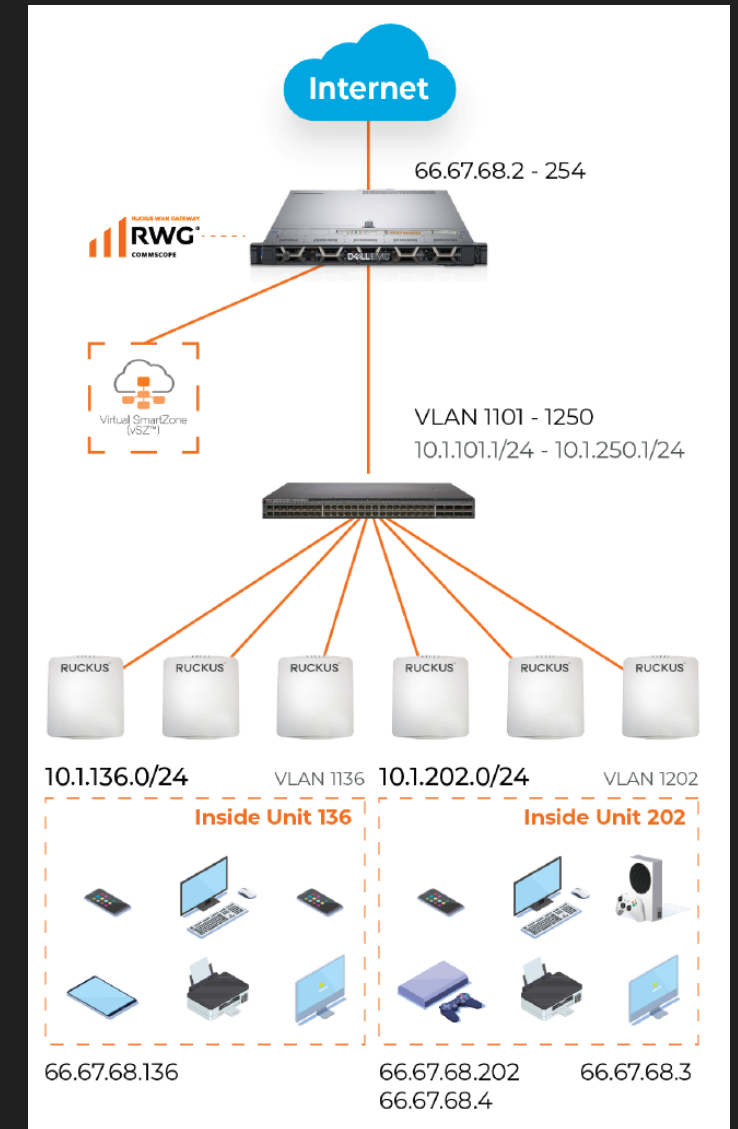
A range of S/M/L/XL servers can be purchased directly from RUCKUS



A hypervisor enables SPs to incorporate 3rd party services without additional hardware.

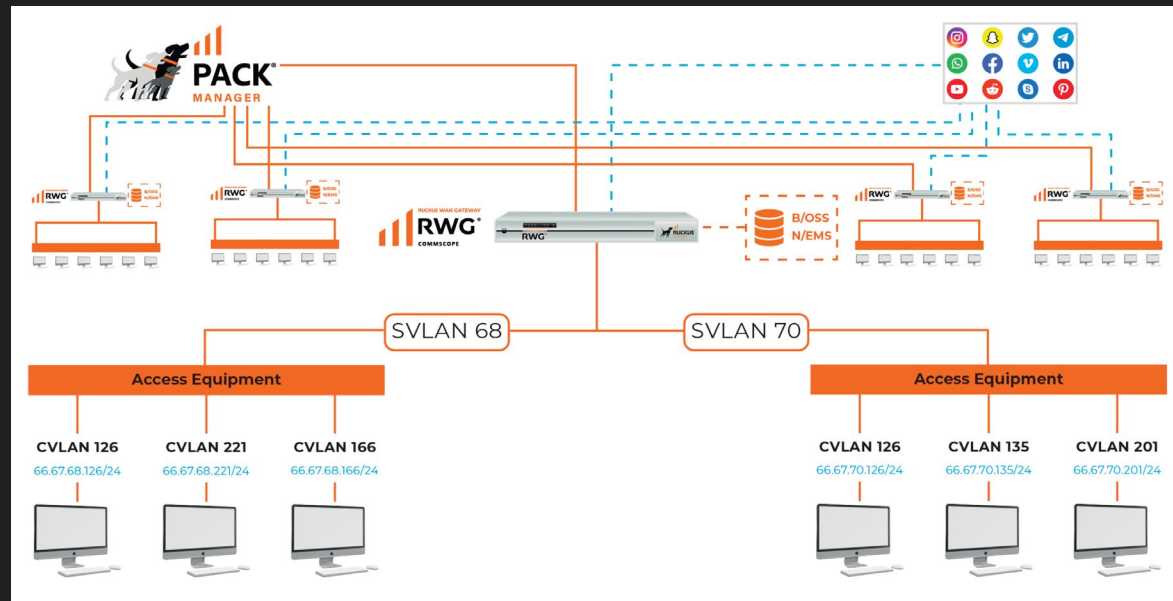
- 
- Routing
 - SD-WAN
 - WAN Optimization
 - Caching
 - Equalization
 - L7 Firewall Content Filter & Analytics
 - Hypervisor to support 3rd party SW
 - UTM IPS IDS
 - VPN Concentrator
 - 3rd-party DB integration
 - NAC AAA engine
 - Marketing Integration
 - NMS EMS
 - Location Engine
 - Wireless Mgmt
 - Day Zero Config
 - Day 1 Template
 - RESTful API
 - IoT

- The solutions for the MDU/MTU and MSPs verticals use the following technologies:
 - Virtual Residential Gateways (vRG)
 - Single SSID using DPSKs
 - Portals and Plans
 - Integrated Billing
- The diagram shows two units using dedicated VLANs and subnets.
- All devices in the same unit can use the same SSID and DPSK.
- Portals can be used to manage DPSK, NAT forwarding and content filtering.

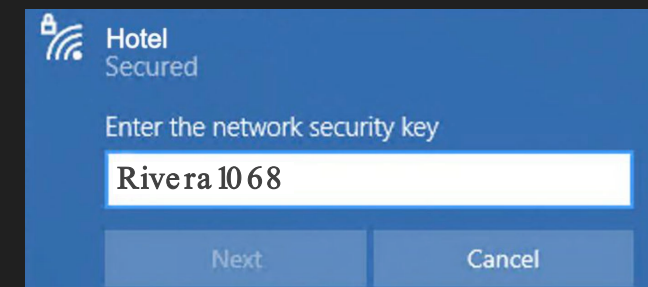
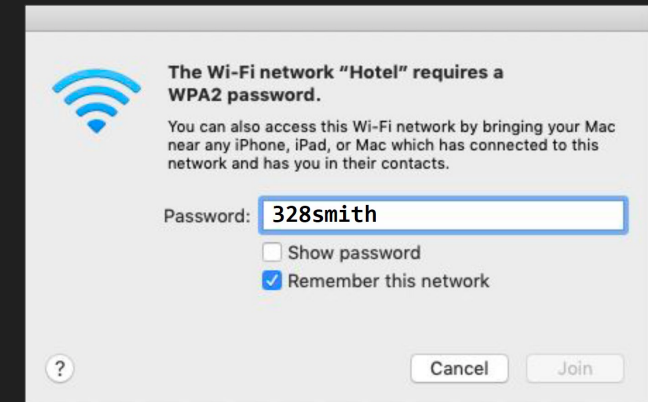


Large Service Provider

- Large service providers often require similar technologies as in the MDU/MTU verticals, but in addition we may also encounter:
 - Microsegmentation exceeding the capacity of regular VLANs.
 - SD-WAN using VPNs, BGP, link aggregation and link selection.
 - Rate shaping and QoS.
 - Multiple RWG instances managed by Pack Manager.
- This diagram shows microsegmentation extended by the use of Q-in-Q.



- HSP solutions require some unique capabilities:
- A unified network to support guests and employees, complete with SD-WAN, ZTNA and N/EMS.
- Maximize HSIA scores (i.e. guest satisfaction). Guest Internet services are just as important as clean sheets and comfortable beds.
- PMS integration to increase direct and indirect revenue.
- Social login, DPSK mangling and Location-Based services.
- IoT devices control.



Thank You

To Close

Steve Kent, Sales and Marketing Director at Purdicom

Chris Elliot, EMEA Channel Director



Watch our Partner Power video here:
<https://www.youtube.com/watch?v=7RDvCSlHwxs>

Thank you

