

# Not For Distribution



# Ruckus Cloud

Introduction

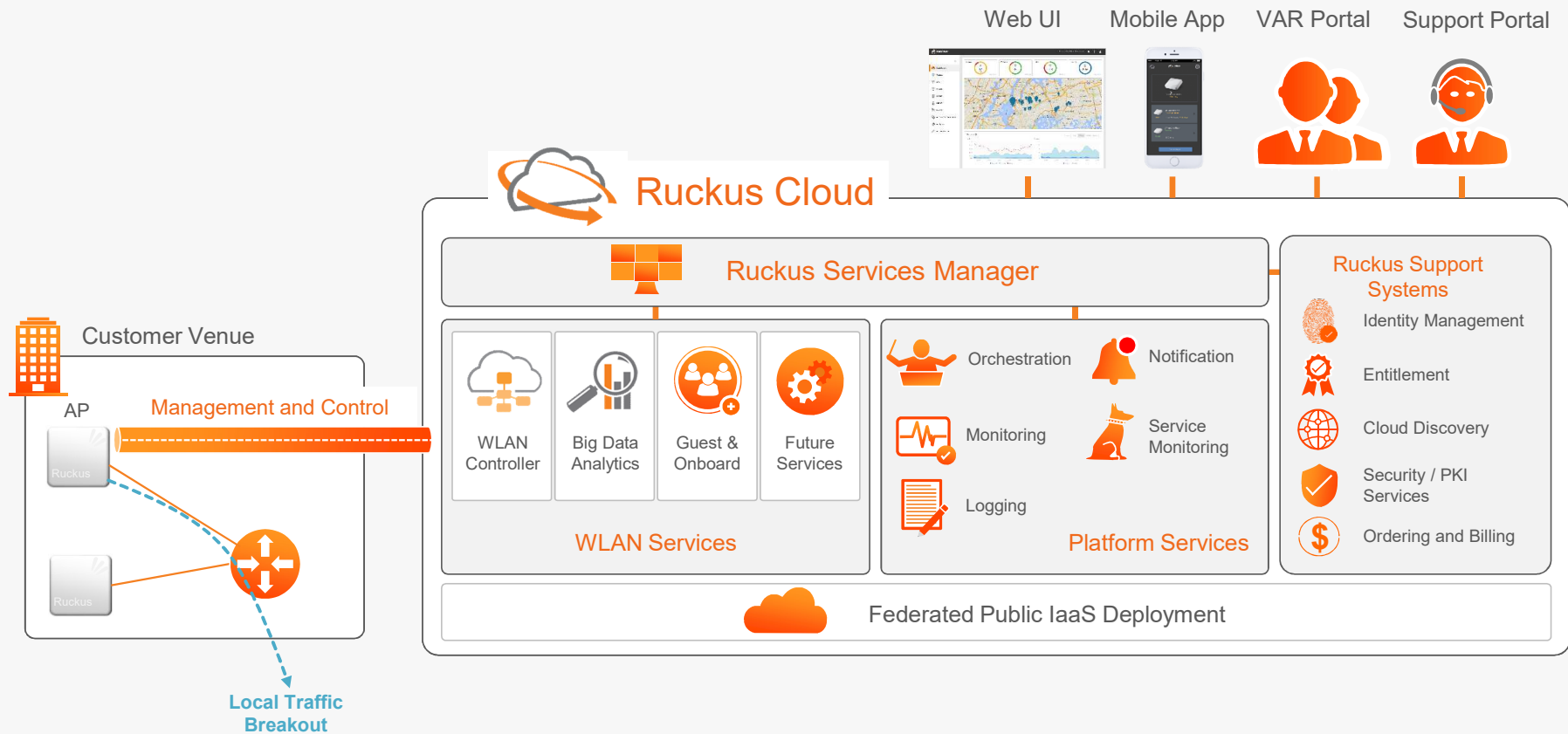
## What is Ruckus Cloud?

- Wireless as a service
- Same great Ruckus Features
- Low infrastructure investment



# Ruckus Cloud

## Introduction



# Ruckus Cloud

## Introduction



### Industry-Best RF

Wi-Fi that delivers, for more clients, in tougher conditions, with higher user satisfaction



### Intent-Driven UI

Overworked IT can setup and manage a multi-site WLAN with confidence



### Dashboard

Check on device status and know your network's health in just a glance



### Guest Services

Simplify and personalize the guest network experience with built-in tools



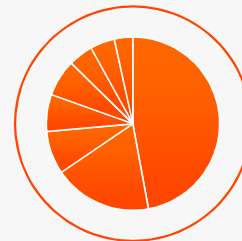
### Reporting & Analytics

Compare trends and inform your business decisions with custom reports



### Mobile App

Workflows for quick setup and easy operation including alerts, config, and monitoring



### App Visibility

Know the key applications consuming bandwidth; take action as needed



### WLAN Services

Use an array of easy-to-set-up WLAN types to meet your service requirements

**Move Faster. Do More. Get Kudos.**

Reduce the complexity of managing a network while ensuring a Wi-Fi experience that users love.



# Problem Solved

In The Ideal World

**1**

Perfect Wi-Fi, all the time

**2**

Limited IT staff, no problem

**3**

Consistent experience, regardless of AP or venue count

**4**

Change your architecture, keep your APs

# Problem Solved

The Reality

RF is unpredictable and non-deterministic.

WLANs are complex. Hiding complexity is an art.

Cloud-scale requires a clean slate.

Reusability requires: (a) more than one architecture; (b) an adaptable AP.



Ruckus *Cloud Wi-Fi* is  
WLAN Management-as-a-Service that enables  
organizations with limited IT resources to set-up, manage,  
monitor and scale a high-performance multi-site WLAN  
without compromising on Wi-Fi performance.



# Ruckus Cloud

Introduction – Multi Tenancy

## Tenant View

**RUCKUS PARTNERS**

You can delegate administration rights to Ruckus Partners.

Partners which accept your invitation – their administrators will have the same rights as your local administrators

[+ INVITE RUCKUS PARTNER](#)

| PARTNER NAME | STATUS         | ACTION        |
|--------------|----------------|---------------|
| Phal Yahoo   | Access granted | Revoke access |

Invite Ruckus Partner

☒ Invite a partner:

☐ Suggest me a partner:

An invitation will be sent to the selected Ruckus partner.  
Once accepted, the partner will gain administrator rights to your system.

[Cancel](#) [OK](#)

- Tenants invite trusted partners to monitor and manage the system
- Tenants control partner access, can revoke at any time

## Partner View

**RUCKUS** BigDog Partner  [Help](#) bigdog@partner.com

**Tenant List**

- Athens School District
- Big Lake Christian Schools
- Bloomington Schools
- Cuyahoga Medical
- Metro City Schools
- Rogers Community School District
- Springfield City Schools
- Toy Manufacturing Inc.

- Partners can oversee multiple networks at the same time
- Easily access managed tenants from a single partner dashboard

# Positioning

Ruckus Range

1

**Controller-less  
(Unleashed)**



**Plug-and-play**

2

**Public Cloud  
(Cloud Wi-Fi)**



**Max Intuitive**

3

**Appliance  
(SZ, ZD)**



**Max Control**

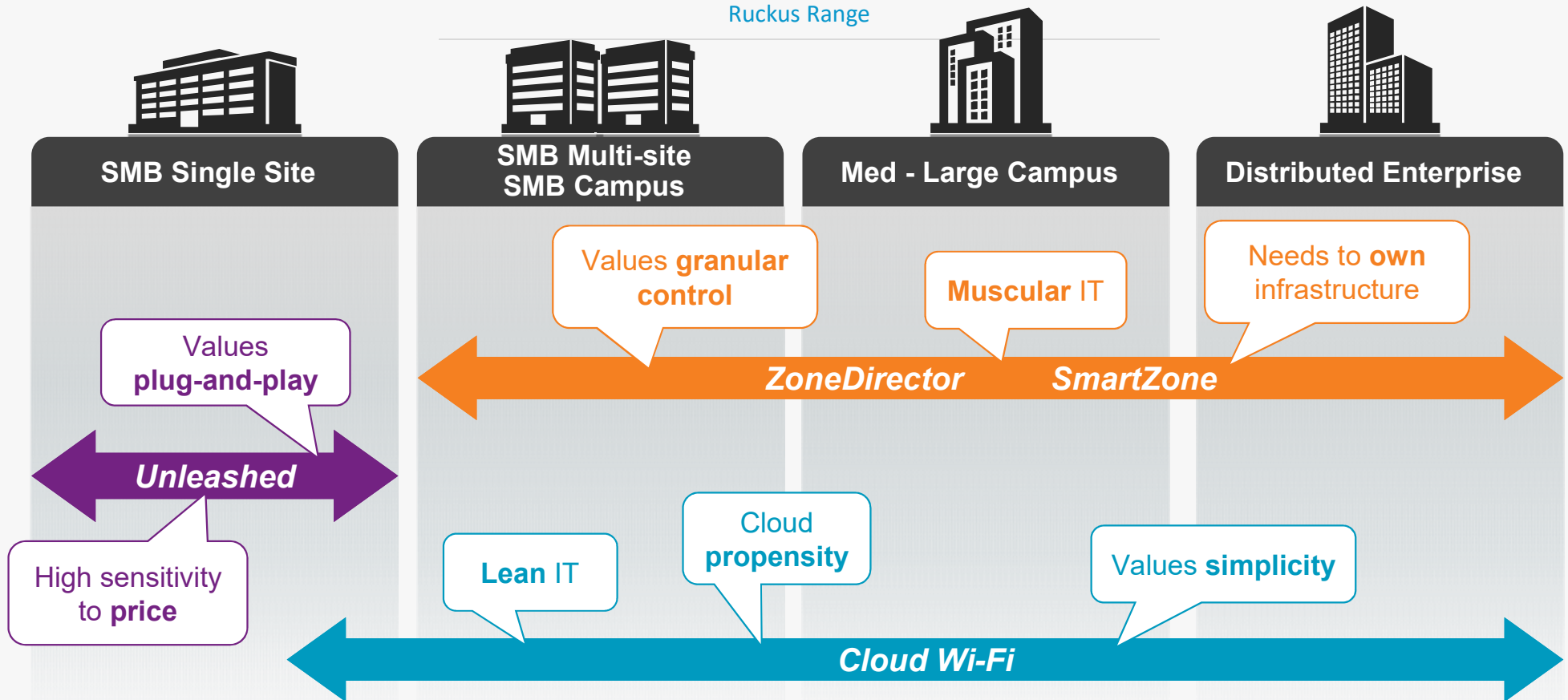
4

**Data Center  
(Virtual SmartZone)**



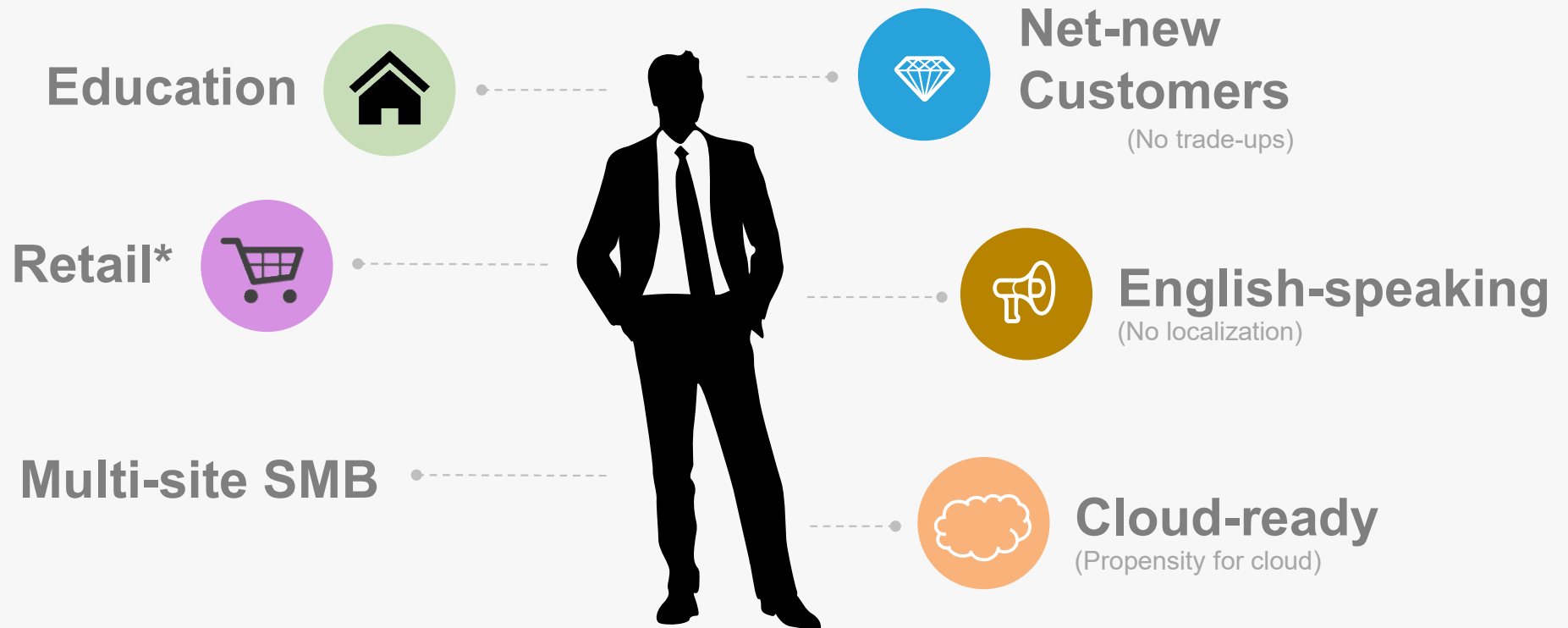
# Positioning

Ruckus Range



# Positioning

Where & Who

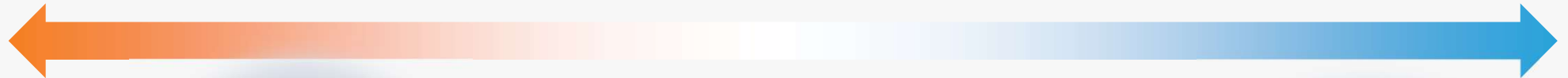


# The Opportunity

Controller Vs Cloud

Best to Sell Controller

Best to Sell Cloud



Bias for  
Traditional  
Architecture

“No Cloud”  
policy

3<sup>rd</sup> Party  
Integration

Need for  
Granular Control  
& Features

Long-term  
Horizon

Don't Own  
Stuff

Manage Across  
Multiple Site

Short-term  
Horizon

Need for  
Place

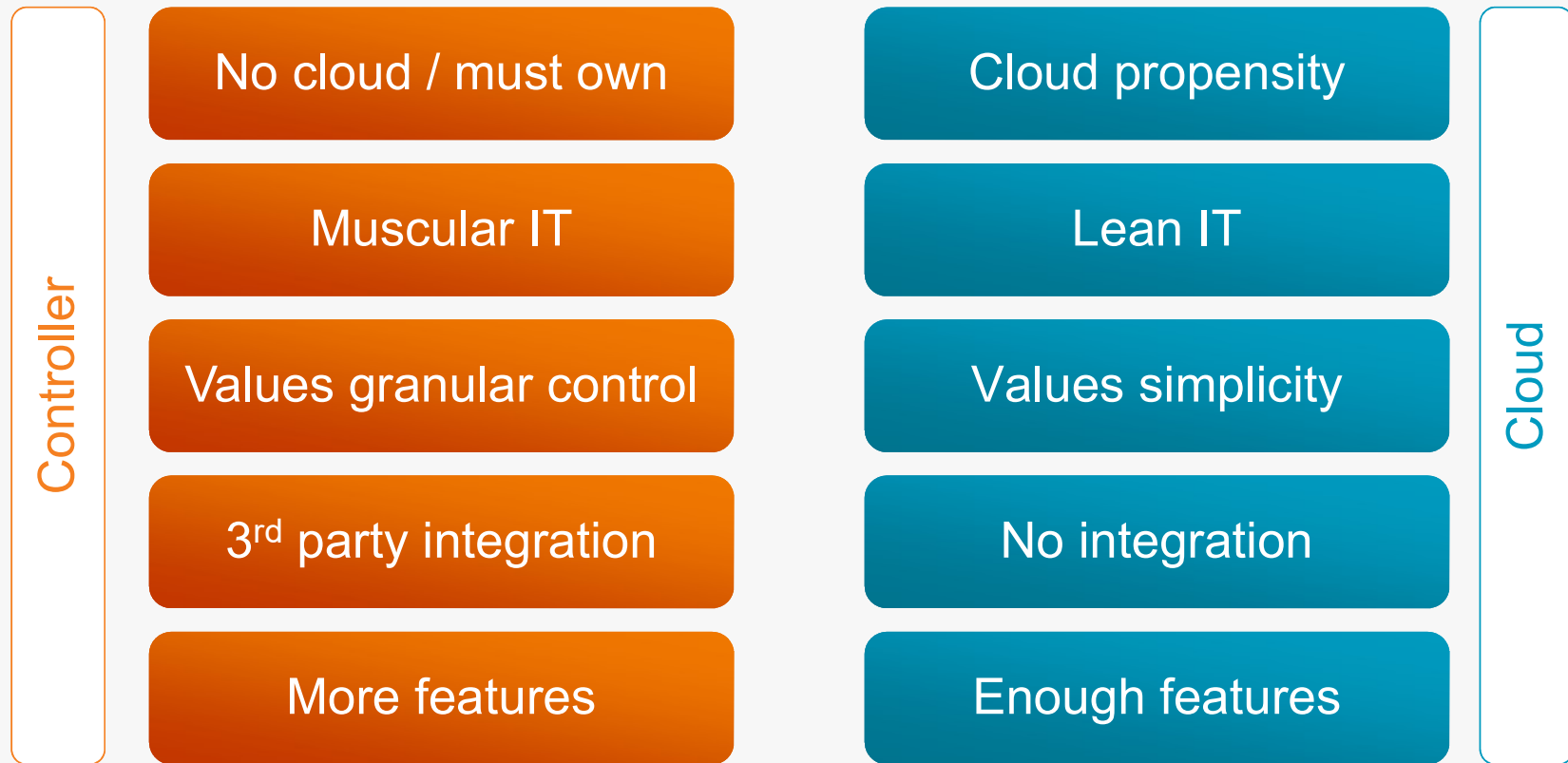
Need for  
Time

Need for  
Simplicity

Bias for  
Cloud

# The Opportunity

Controller Vs Cloud



# The Opportunity

Controller Vs Cloud

## Controller

### Granular Control

- > 1K configuration knobs (profiles, templates...)

### Traffic

- Drop all traffic locally or tunnel to cust. DC
- All config & mgmt data resides in cust. DC

### Scale

- May need to upgrade h/w as network grows

### Other Considerations

- SCI is a separate software component

## Cloud

### Simplicity

- Fewer configuration knobs (< 200)
- Mobile app with push, SMS notifications

### Traffic

- Client traffic remains at customer premises

### Scale

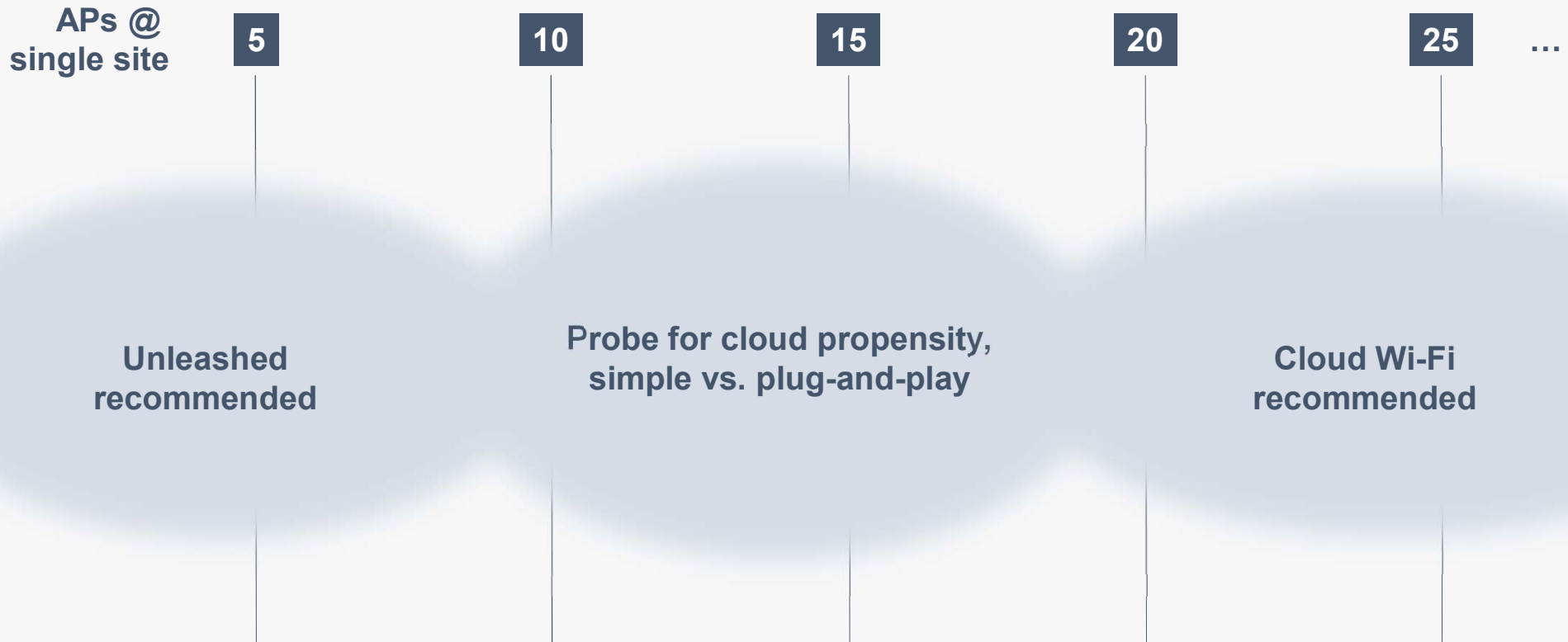
- Network scales linearly to any size

### Other cloud benefits

- SCI-based analytics with 6-mo retention
- HA built-in; regular feature updates

# The Opportunity

Cloud Vs Unleashed



**Unleashed is suitable only for single-site deployments**

# What do I get?

The Usual Suspects

- Built to perform in the harshest of conditions...
  - High loss
  - High interference
  - High client density
- BeamFlex+ and MU-MIMO
  - Dynamic antenna adaptation and transmit beamforming (at the same time)
  - Proven capacity gains > 2.5x with MU-MIMO
  - Polarization diversity enhances mobile device uploads
  - Best airtime efficiency in the industry
- Channel Fly
- Per Site Mesh



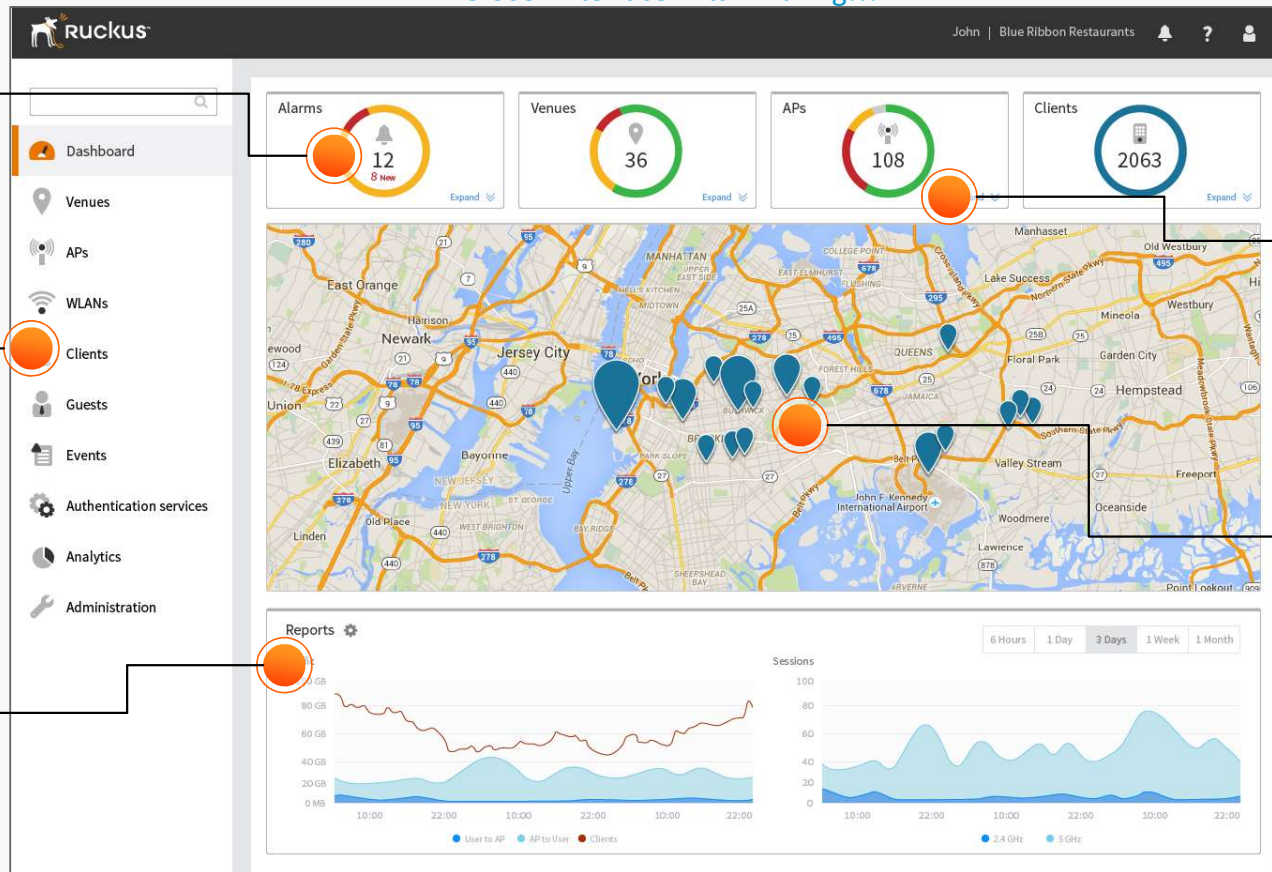
# What Do I Get?

The User Interface – Its Amazing!!!

A smart dashboard answers the critical question: how is the network doing?

An intent-driven UI makes for intuitive workflows—equally easy on day1 or 100.

Customizable reports allow you to focus in on key metrics that drive your business.

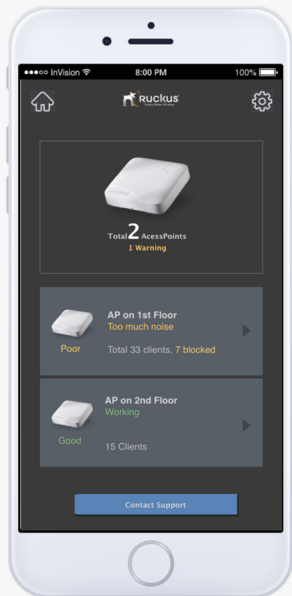


View AP status at a glance, navigate to the AP page for detailed information.

Maps show venue health and serve as a launch point to check APs, clients, usage, and more for a venue.

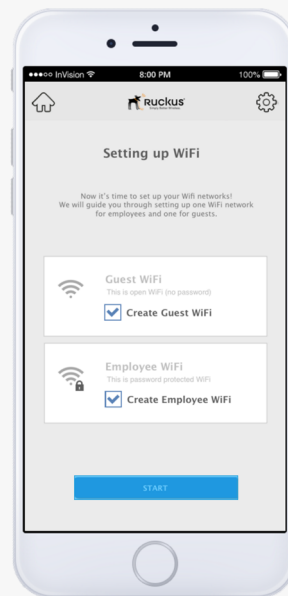
# What Do I Get?

Everyone loves an App these days



## Provision

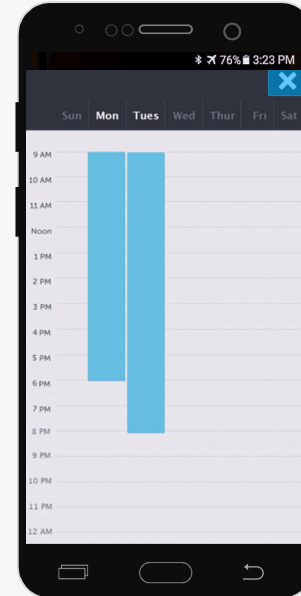
Easily add APs by scanning the barcode on the back



## Setup

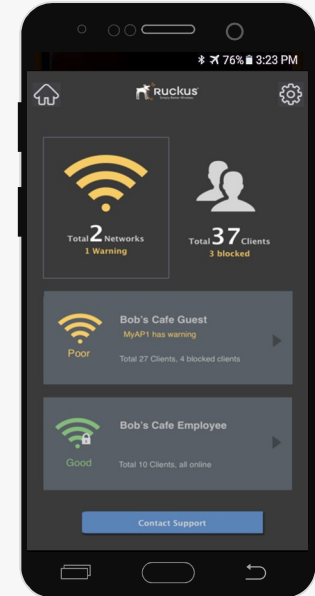
Create, modify, and monitor WLANs and their settings

iOS  
-or-  
Android



## Control

Control your system with scheduled WLANs per venue



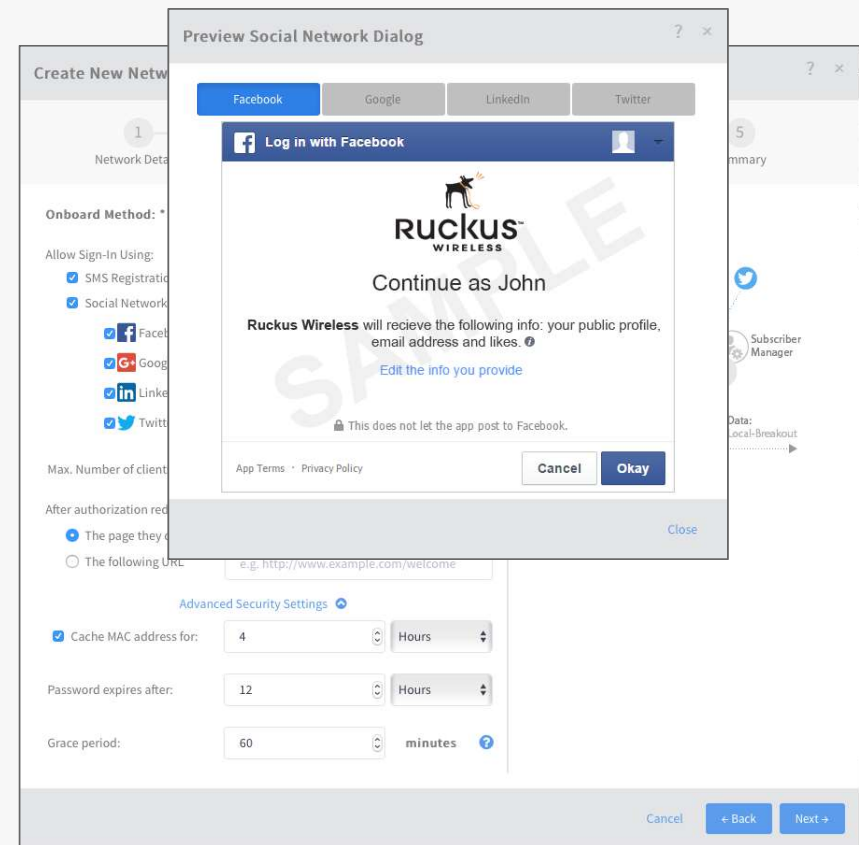
## Monitor

Monitor connections, status, and network performance

# What Do I Get?

Great Guest Networking features

- Rich guest / visitor connectivity, free with cloud subscription
  - Social network sign-in
  - SMS Registration
  - Sponsored guest passes
- Present your brand and interact with visitors
- Simple workflows, easy setup
- “Scan business card” guest feature
- Control your guest connections
  - Guest pass expiration
  - Number of devices
  - Guest pass distribution by SMS, email, print
- Scheduled Welcome Portals
- Fully Customize the Portal



# What Do I Get?

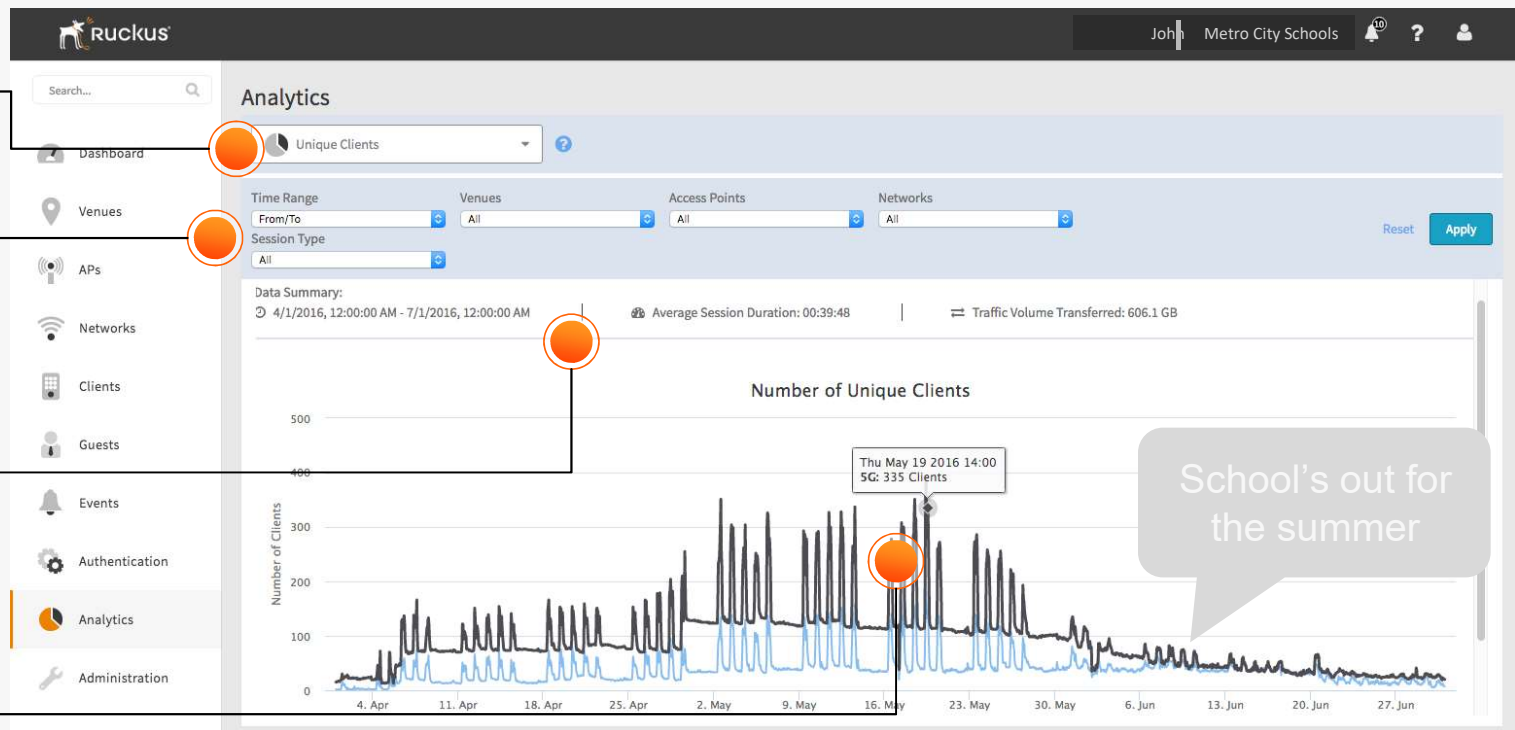
SCI level Analytics and Data Capture

Choose from a long (and growing) list of data and reports to analyze

Pick the right filters (predefined or custom time ranges, venues, APs, networks) for your use case

Run customized long-term reports and review quick stats at a glance

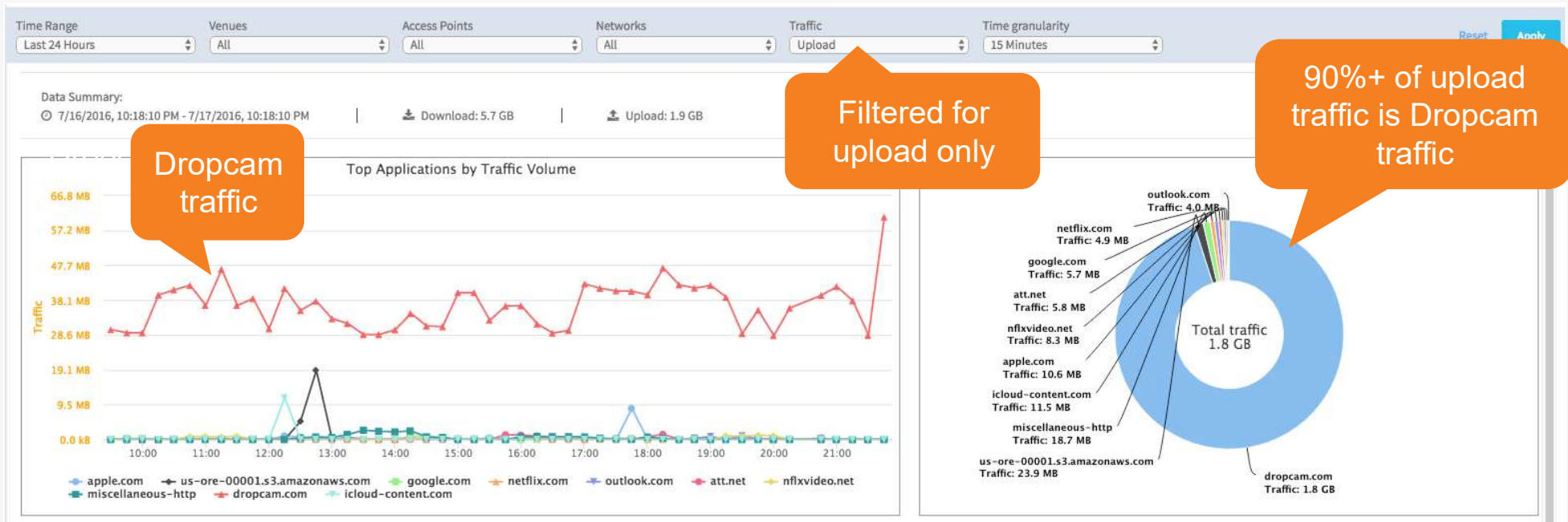
Hover for more information; select or de-select chart data interactively



\*Up to 6 months of historic data

# Analytics

SCI level Analytics and Data Capture



- Sophisticated DPI algorithms accurately identify 2000+ application types
- Use smart filters to quickly detect the apps consuming most traffic
- Run reports and trending using 6 months of historical data

# What Do I Get?

## WLAN Features



### Security

802.1X/EAP, VLANs, client isolation, guest access control, RADIUS failover



### Authentication

Open, PSK, guest pass, social, SMS registration, onboard, 802.1X, Cloudpath



### Flexibility

Time schedules, maximum client count, assignment per venue



### Portals

Customize logos, advertisements, messaging text, terms and conditions



### Optimization

Rate limiting, band balancing, airtime fairness, fast roaming (11k/r), management rate control, minimum data rates

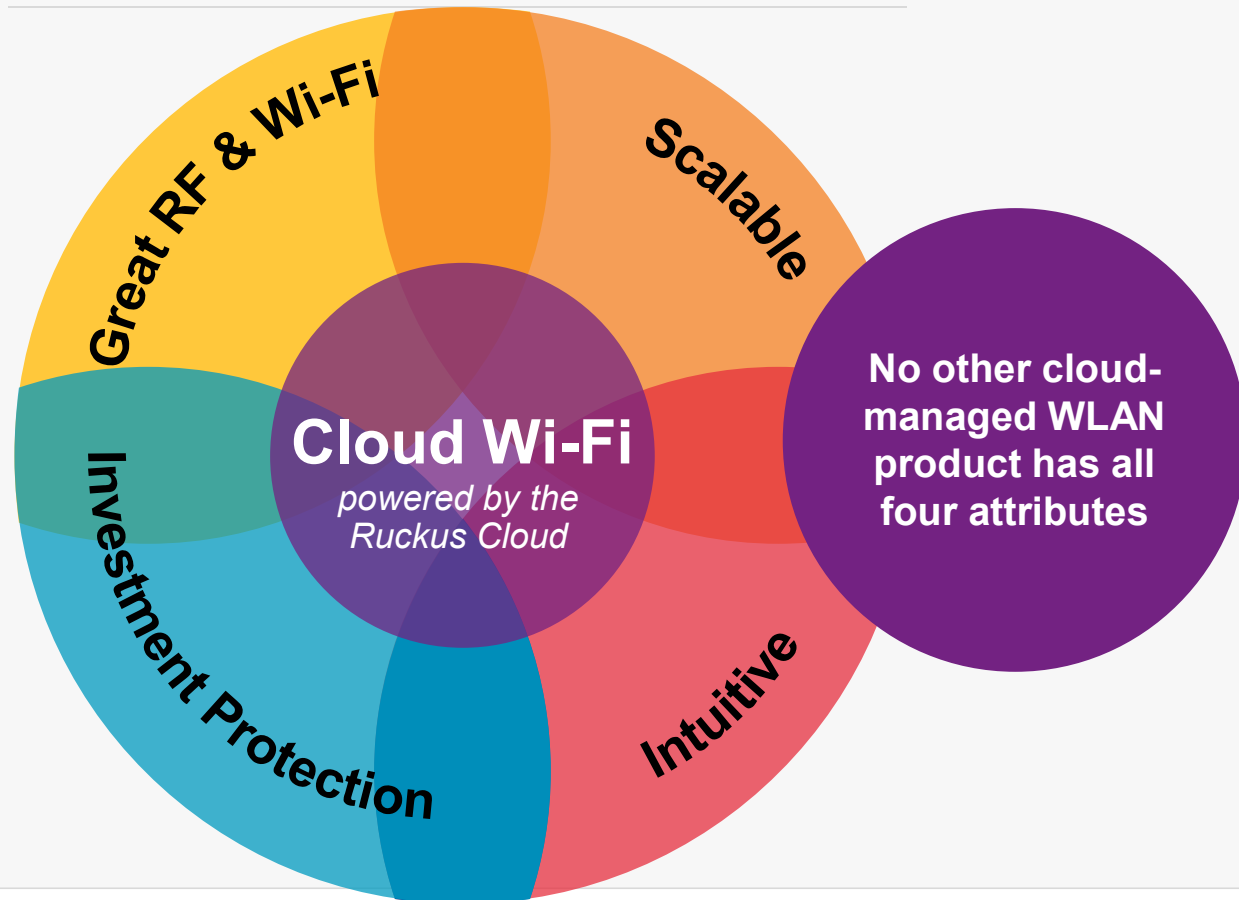


### ...More

Mesh (simultaneous client service and backhaul)

# The Sell

We Tick all the Boxes



# The Sell

But What about the Competition?



|                          |  |  |  |  |
|--------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| AP scalability           | High                                                                              | High                                                                                | Moderate                                                                            | Moderate                                                                            |
| Multi-site w/ single UI  | Yes                                                                               | Yes                                                                                 | Yes                                                                                 | Yes*                                                                                |
| AP investment protection | Yes                                                                               | No                                                                                  | Yes                                                                                 | Yes                                                                                 |
| Mobile app-enabled       | Yes                                                                               | Yes                                                                                 | No                                                                                  | Yes                                                                                 |
| Feature breadth          | Medium                                                                            | High                                                                                | High                                                                                | Medium                                                                              |
| UI complexity            | Low                                                                               | Medium                                                                              | High                                                                                | Low                                                                                 |
| RF/Wi-Fi performance     | High                                                                              | Average                                                                             | Poor - Avg                                                                          | Average                                                                             |

\* Severely constrained

# AP Compatibility

Unleashed & Standalone

## Unleashed APs compatible with Ruckus Cloud

Unleashed Indoor APs

| Part Number   | Description                                                         | Ruckus Cloud Wi-Fi Supportability | Notes                                        |
|---------------|---------------------------------------------------------------------|-----------------------------------|----------------------------------------------|
| 901-R310-XX02 | <b>R310 Unleashed</b> , entry Level 802.11ac 2x2:2                  | Now                               |                                              |
| 9U1-R500-XX00 | <b>R500 Unleashed</b> , mid-range 802.11ac 2x2:2                    | Now                               |                                              |
| 9U1-R600-XX00 | <b>R600 Unleashed</b> , mid-range 802.11ac 3x3:3                    | Now                               |                                              |
| 9U1-R710-XX00 | <b>R710 Unleashed</b> , high-end 802.11ac Wave 2 4x4:4 with MU-MIMO | Now                               | Disti will start stocking from early October |

Unleashed Outdoor APs

|               |                                                                                                         |     |                                              |
|---------------|---------------------------------------------------------------------------------------------------------|-----|----------------------------------------------|
| 9U1-T300-XX02 | <b>T300 Unleashed</b> , entry-level, outdoor 802.11ac 2x2:2 with integrated omni antennas               | Now |                                              |
| 9U1-T300-xx81 | <b>T300e Unleashed</b> , entry-level, outdoor 802.11ac 2x2:2 with integrated omni or external antennas  | Now |                                              |
| 9U1-T301-xx51 | <b>T301s Unleashed</b> , entry-level, outdoor 802.11ac with 120° or 30° directional integrated antennas | Now |                                              |
| 9U1-T301-xx61 | <b>T301n Unleashed</b> , entry-level, outdoor 802.11ac with 120° or 30° directional integrated antennas | Now |                                              |
| 9U1-T710-XX00 | <b>T710s Unleashed</b> , high-end outdoor 802.11ac Wave 2 4x4:4 with MU-MIMO                            | Now | Disti will start stocking from early October |
| 9U1-T710-xx51 | <b>T710s Unleashed</b> , high-end outdoor 802.11ac Wave 2 4x4:4 with MU-MIMO                            | Now | Disti will start stocking from early October |

## ZoneFlex APs compatible with Ruckus Cloud

| Part Number   | Description                                                                                        | Ruckus Cloud Wi-Fi Supportability | Note                     |
|---------------|----------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------|
| 901-R310-XXXX | <b>ZoneFlex R310</b> , entry Level 802.11ac 2x2:2                                                  | January 2017                      | Min. AP firmware 104.x.y |
| 901-R500-XXXX | <b>ZoneFlex R500</b> , mid-range 802.11ac 2x2:2                                                    | January 2017                      | Min. AP firmware 104.x.y |
| 901-R510-XXXX | <b>ZoneFlex R510</b> , mid-range 802.11ac Wave 2 2x2:2 with MU-MIMO                                | Now                               |                          |
| 901-H510-XXXX | <b>ZoneFlex H510</b> , dual-band 802.11ac Wave 2 2x2:2 wall-mounted, with 5 Gigabit Ethernet ports | Now                               |                          |
| 901-R600-XXXX | <b>ZoneFlex R600</b> , mid-range 802.11ac 3x3:3                                                    | January 2017                      | Min. AP firmware 104.x.y |
| 901-R700-XXXX | <b>ZoneFlex R700</b> , high-end 802.11ac Wave 1 3:3:3                                              | January 2017                      | Min. AP firmware 104.x.y |
| 901-R710-XXXX | <b>ZoneFlex R710</b> , high-end 802.11ac Wave 2 4x4:4 with MU-MIMO                                 | January 2017                      | Min. AP firmware 104.x.y |

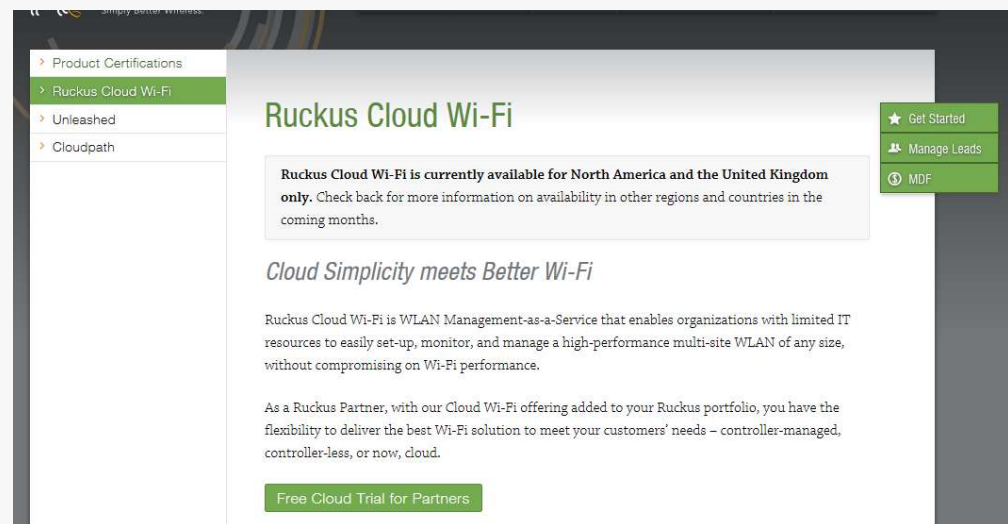
Note: R300 and other 11N APs as well as H500 are not supported in the Cloud.

|               |                                                                                                        |                |                          |
|---------------|--------------------------------------------------------------------------------------------------------|----------------|--------------------------|
| 901-T300-XX02 | <b>ZoneFlex T300</b> , entry-level, outdoor 802.11ac 2x2:2 with integrated omni antennas               | January 2017   | Min. AP firmware 104.x.y |
| 901-T300-xx81 | <b>ZoneFlex T300e</b> , entry-level, outdoor 802.11ac 2x2:2 with integrated omni or external antennas  | January 2017   | Min. AP firmware 104.x.y |
| 901-T301-xx61 | <b>ZoneFlex T301n</b> , entry-level, outdoor 802.11ac with 120° or 30° directional integrated antennas | January 2017   | Min. AP firmware 104.x.y |
| 901-T301-xx51 | <b>ZoneFlex T301s</b> , entry-level, outdoor 802.11ac with 120° or 30° directional integrated antennas | January 2017   | Min. AP firmware 104.x.y |
| 901-T710-xx01 | <b>ZoneFlex T710</b> , high-end outdoor 802.11ac Wave 2 4x4:4 with MU-MIMO and BeamFlex+               | Late Nov 2016* | Release 16.06*           |
| 901-T710-xx51 | <b>ZoneFlex T710s</b> , high-end outdoor 802.11ac Wave 2 4x4:4 with MU-MIMO and BeamFlex+              | Late Nov 2016* | Release 16.06*           |

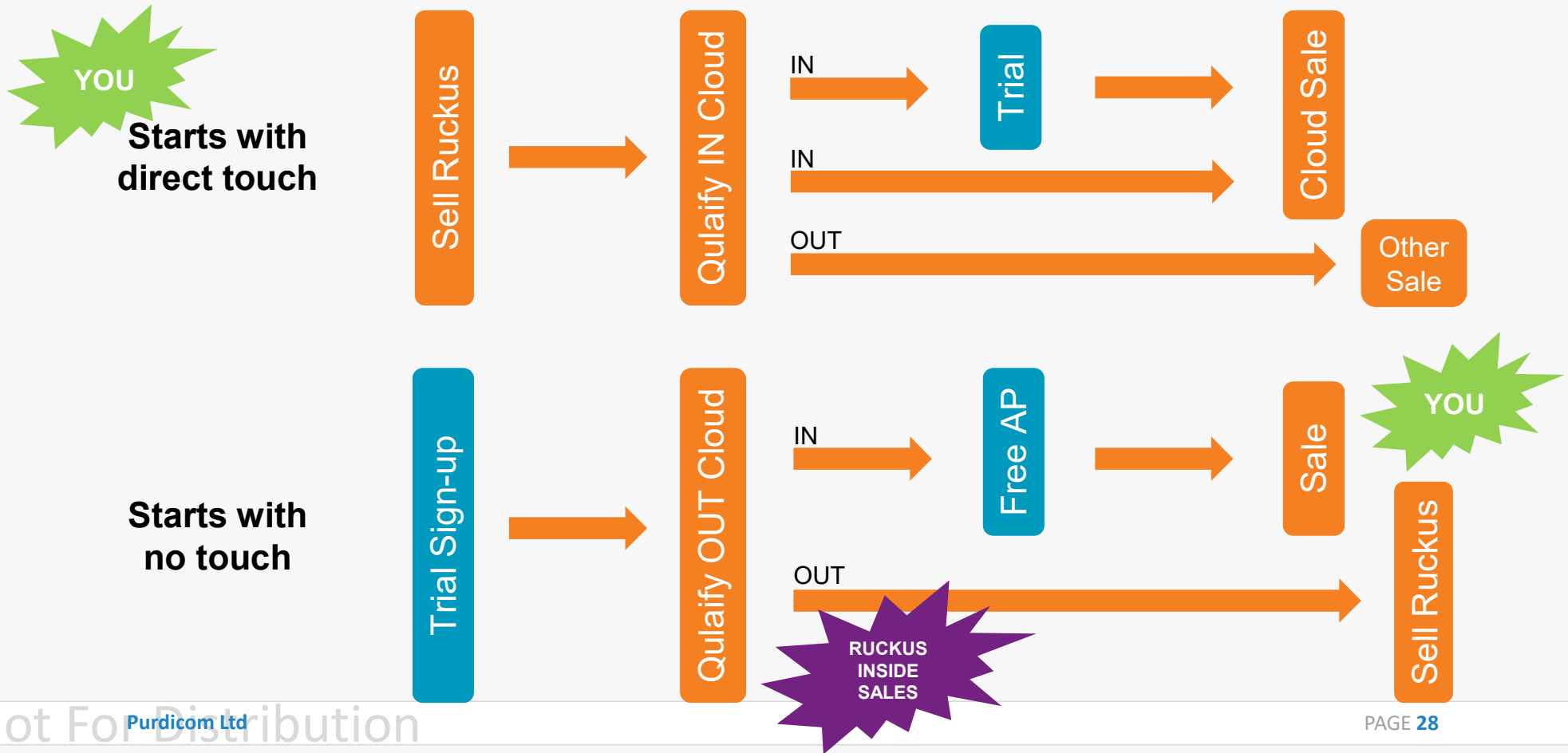
# Ruckus Cloud Demo

Try It!! Invite others to try it

<https://partners.ruckuswireless.com/products/cloud-wifi>



## Route To Sell



# Any Questions

Live Demo

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