Why Ruckus?

A quick review of our storytelling tools

Selling Ruckus

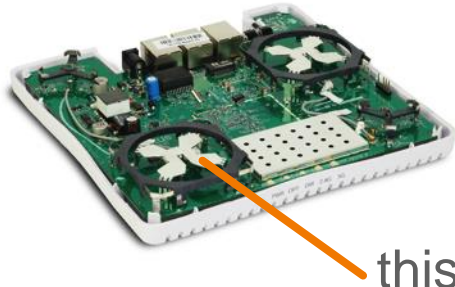**Key Takeaways**

- o true high performance
- o ease of use
- o intelligence *new*
- o lowest total cost of ownership

Formats

- o coffee shop conversation
- o short pitch (most situations)
- o long pitch (big customer, long meeting)
- o technical v. not

Ruckus

Coffee shop conversation

Tools

- o topless AP
- o product guide

this is different

Story

- o Ruckus company stats
- o Criticality of performance
- o BeamFlex difference
- o Results (tests, customers)
- o Product line
- o Takeaways

Short Pitch

this is different

ruckus

The Ruckus Difference

Two kinds of Wi-Fi in the industry:

Adaptive antennas and learning-based self-organizing technology (Ruckus)

Conventional reference-design implementations with zero IP in the radios (everyone else)

Flashlight

Dim light bulb
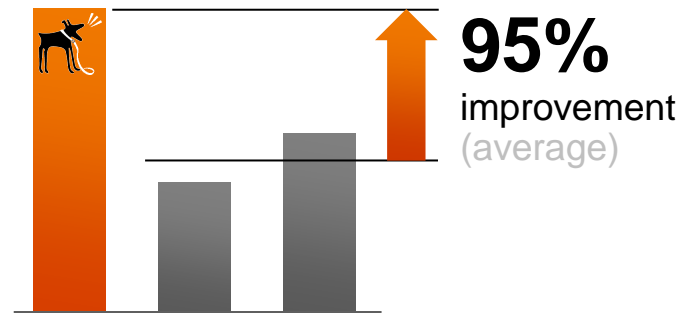
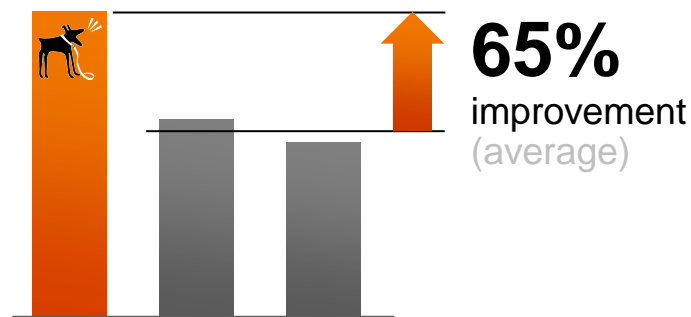# >20,000 customers + Syracuse U. say...

Test Conditions

Results (Total TCP Throughput)

adaptive antennas + learning-based SON (BeamFlex & ChannelFly)

leading conventional reference design implementations

High Density

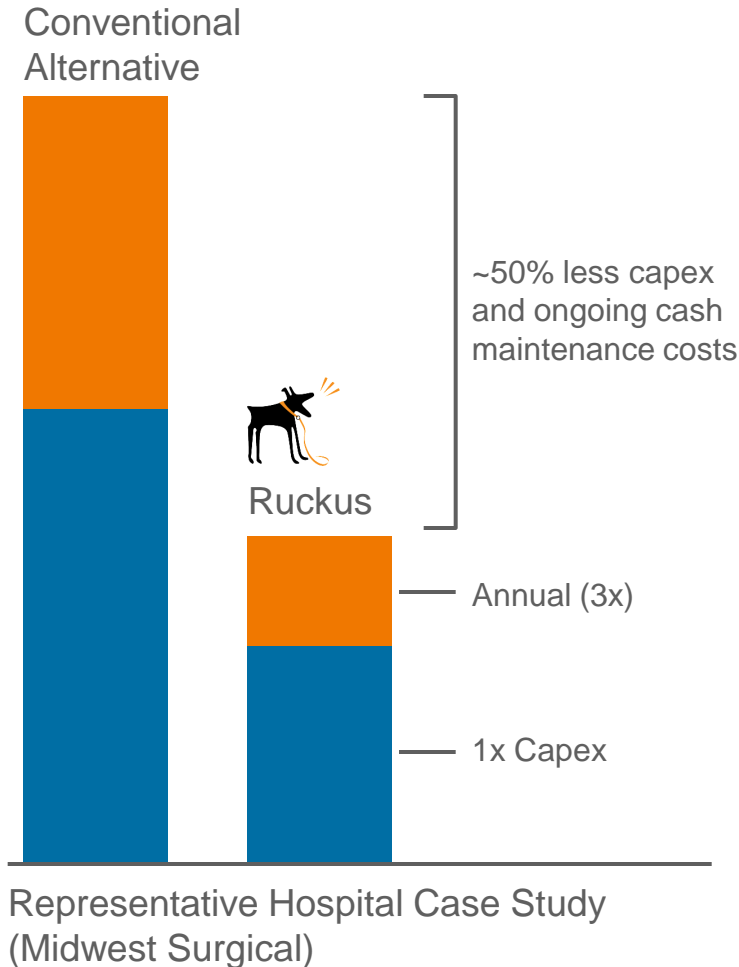**90 active clients per AP**

95%
improvement
(average)

Interference

**6 APs,
120 clients,
1 busy rogue AP**

65%
improvement
(average)

Source: Syracuse University comparative Wi-Fi testing, 2012.

Truly lower TCO in practice

50% Lower cash costs

Conventional Alternative

~50% less capex and ongoing cash maintenance costs

Ruckus

Annual (3x)

1x Capex

Representative Hospital Case Study (Midwest Surgical)

80% Less technical staff time

Conventional Alternative

~80% reduction in technical staff time required for WLAN installation & maintenance

Ruckus

Maintain

Troubleshoot

Deploy

Average results from sample of 40 Ruckus case studies

Ruckus
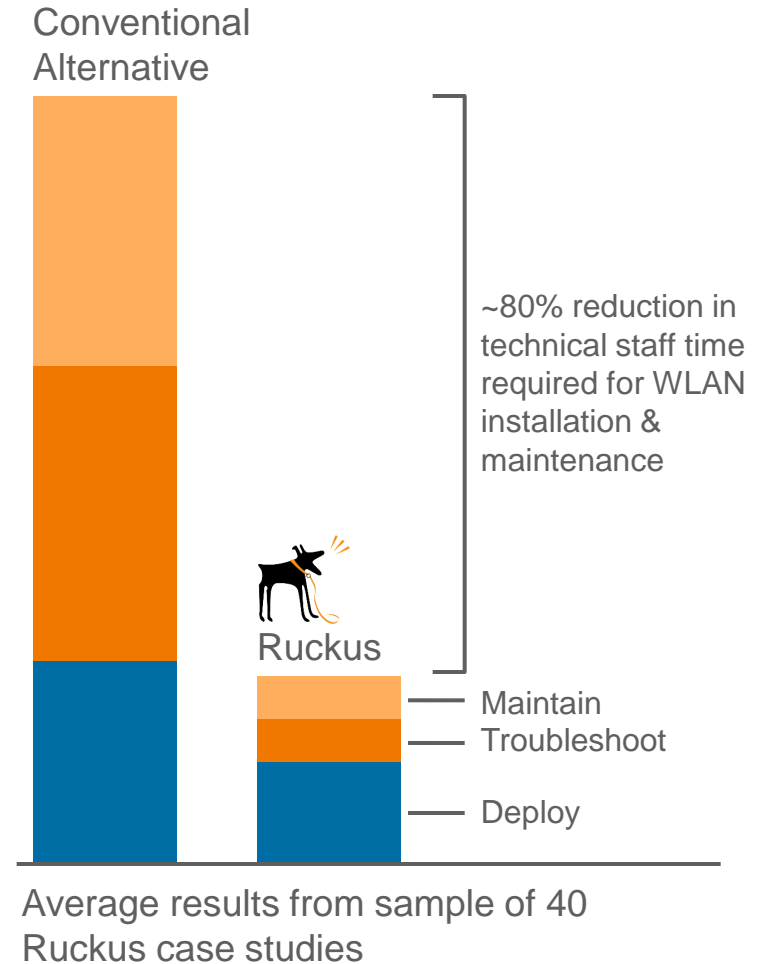
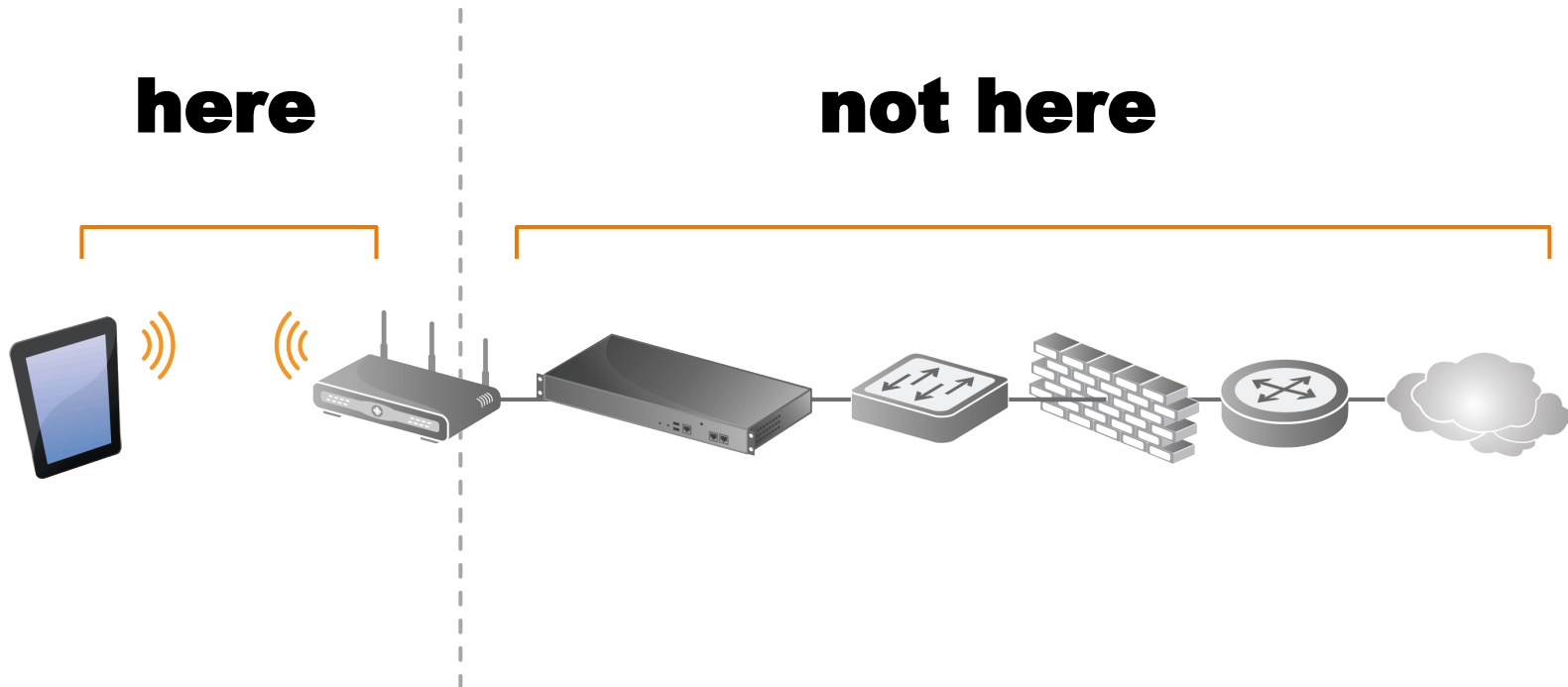# Long Pitch

this is different

ruckus

Performance matters more than ever

- Increasing mission-critical role for mobile applications
- More users, devices, and bandwidth demand per user
- High demand density
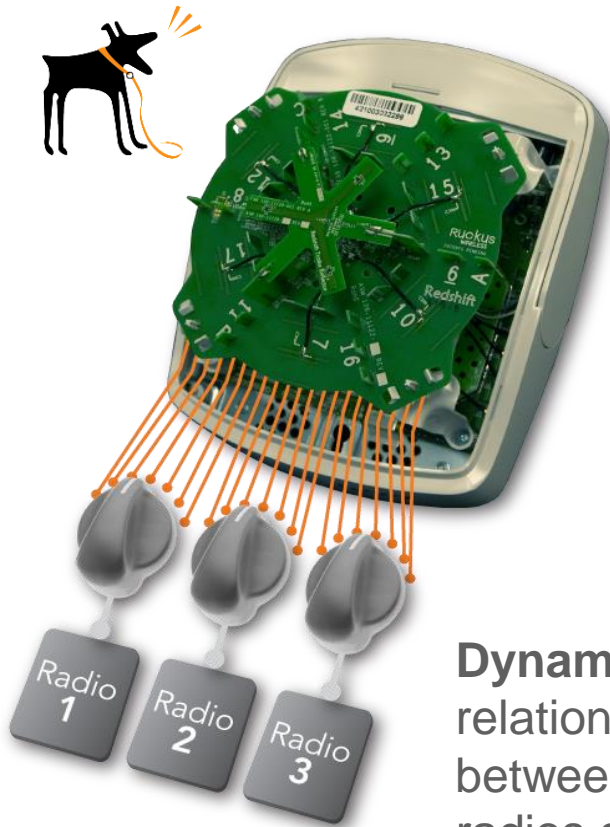- Interference

How to deliver high performance

Apply engineering talent...

here   **not here**

ruckus

How we make it happen

Two kinds of Wi-Fi in the industry:

Adaptive antennas and learning-based self-organizing technology (Ruckus)

Conventional reference-design implementations with zero IP in the radios (everyone else)

Dynamic 1:many relationship between Wi-Fi radios and antennas

Fixed 1:1 relationship between Wi-Fi radios and antennas

ruckus

How we make it happen

Two kinds of Wi-Fi in the industry:

Adaptive antennas and learning-based self-organizing technology (Ruckus)

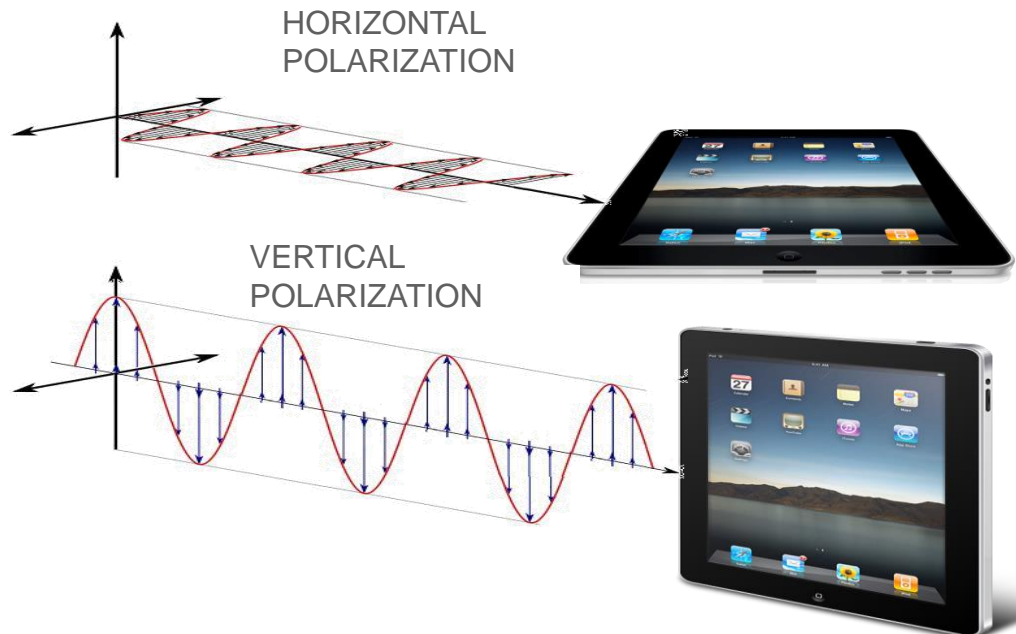Conventional reference-design implementations with zero IP in the radios (everyone else)

Flashlight

Dim light bulb

Adaptive Polarization Diversity

BeamFlex+

○ Better reception for weak and "hard to hear" mobile devices

○ Better transmission to devices constantly changing their orientation

HORIZONTAL POLARIZATION

VERTICAL POLARIZATION

Ruckus

On BeamFlex and beamforming (1)

In response to "beamforming is in the standard so you don't need Ruckus"...

- BeamFlex technology = adaptive antennas

- Beamforming (calculated phase and gain manipulation) is not supported by clients today, so is only useful for meshing

- As client support emerges (in AC wave 2), BeamFlex will continue to deliver differentiating performance through the combination of adaptive antennas and beamforming

ruckus

On BeamFlex and beamforming (2)
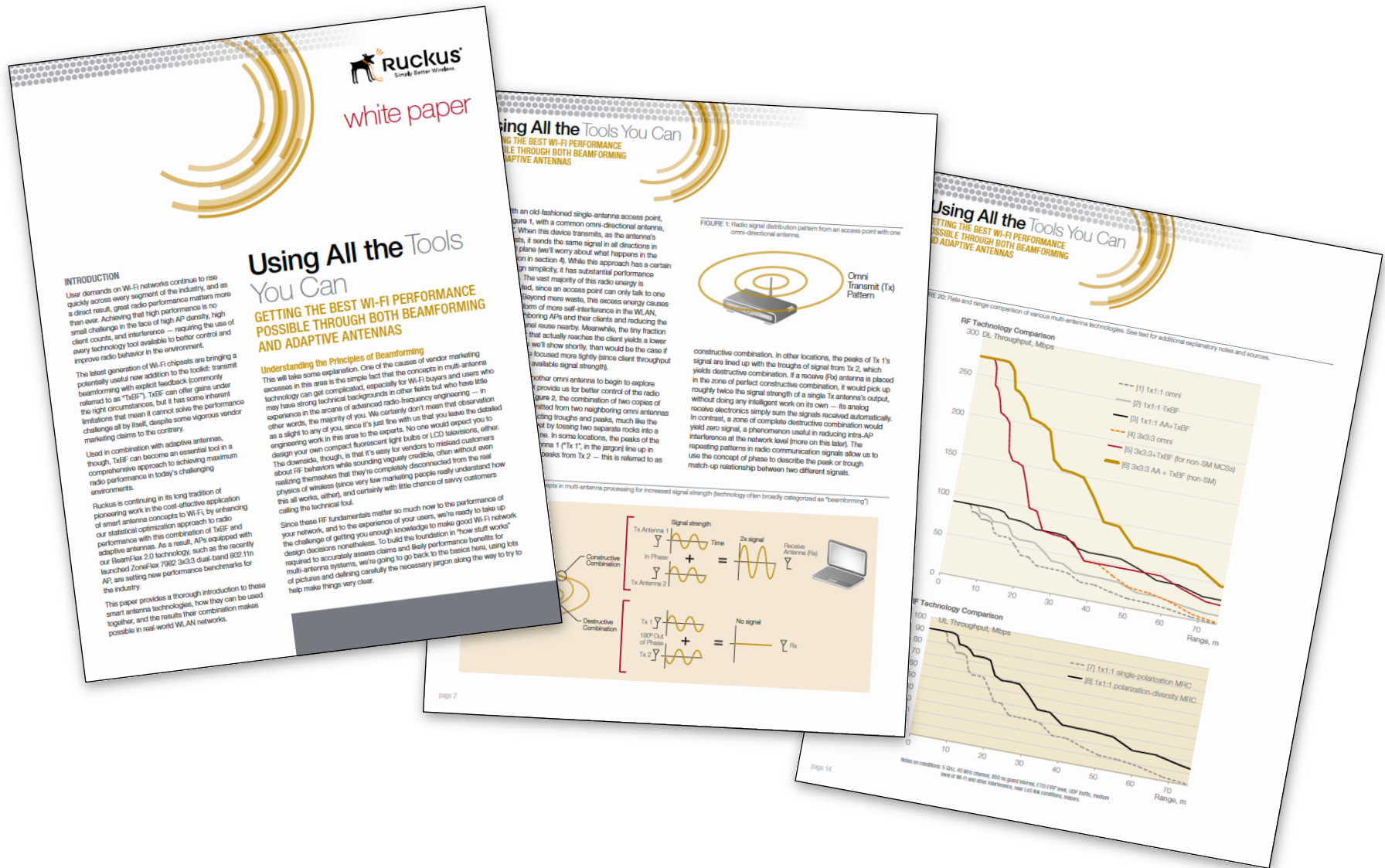
More than just good radios (1)

Smart meshing
- autonomously optimized, self-organizing networks, including hybrid meshing
- adapts to changes in environment

Dynamic channel management
- ongoing channel performance assessment
- adaptation based on realizable capacity (ChannelFly)

Client load balancing
- balances client load across APs by redirecting clients based on neighboring AP connection quality and relative loading
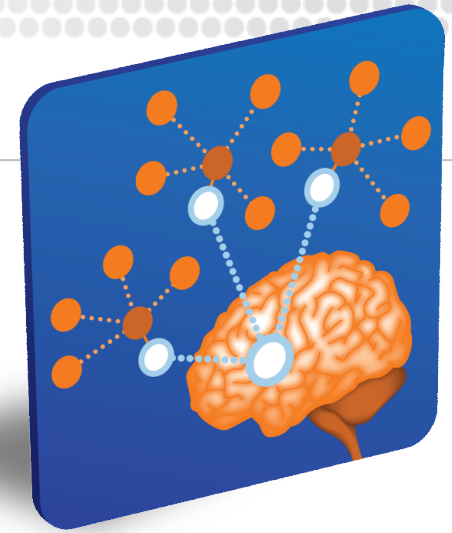
Band steering
- balances client load across bands by redirecting clients based on capabilities
- maximizes overall throughput
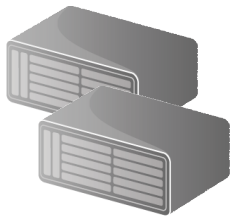
QoS at AP level
- application queues per client
- prioritization of voice, video, and data

Airtime fairness
- round-robin time allocation based on client capabilities
- prevents slower clients from throttling faster ones

Ruckus

More than just good radios (2)

- Identifying user, device, and app classes (e.g. staff, students, guests)
- Onboarding users and devices; managing class-based access
- Large client-count support (~500 per radio)
- Secure authentication for cellular and non-cellular devices
- Relevant context standards compliance (esp. PCI, emission, vibration specs)
- Rich feature sets for dynamic QoS, VLAN, security, and authentication integration with existing IT environment
- Interop with AD, RADIUS, LDAP, property management systems, subscriber gateways, UTM/firewalls, switching platforms
- Massive scale, high-availability, and highly-distributed configurations
- Guest access portal and control
- Vertical application interop (RTLS/LBS, VoIP phones, scanners, medical devices, UC platforms, classroom mgt. apps)
- Simplified web GUI interface for config/admin, rogue detection, spectrum analysis
- Detailed reporting for users, devices, applications, APs — associations, bandwidth consumption, time series, aggregates
- SNMP interfaces for management system integration, more advanced interfaces for big-data analytics feeds (e.g. JSON, XML, RESTful)

Ruckus

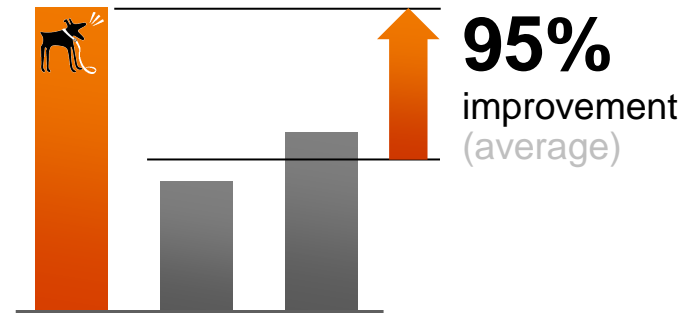# >20,000 customers + Syracuse U. say...

Test Conditions

Results (Total TCP Throughput)
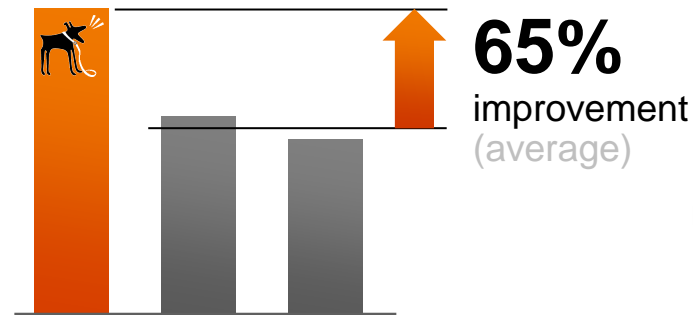
adaptive antennas +
learning-based SON
(BeamFlex & ChannelFly)

leading conventional reference
design implementations

High Density

90 active clients per AP

95%
improvement
(average)

Interference

**6 APs,
120 clients,
1 busy rogue AP**

65%
improvement
(average)

Source: Syracuse University comparative Wi-Fi testing, 2012.

Stress-test results

wirelessLAN PROFESSIONALS

AVG. TCP THROUGHPUT

Single AP, up to 25 iPads with video, no interference

Highest, most reliable performance

Ruckus 7982
Cisco 2602i
HP 430
Cisco 3602i
Xirrus 4820
Aruba 135
Juniper 532
Aerohive AP330
HP 460
Aruba 105
Meraki MR24
Aerohive AP121
Meraki MR16
Linksys EA4500
Ubiquiti UniFi Pro

Lowest, least reliable performance

VIDEO ERRORS
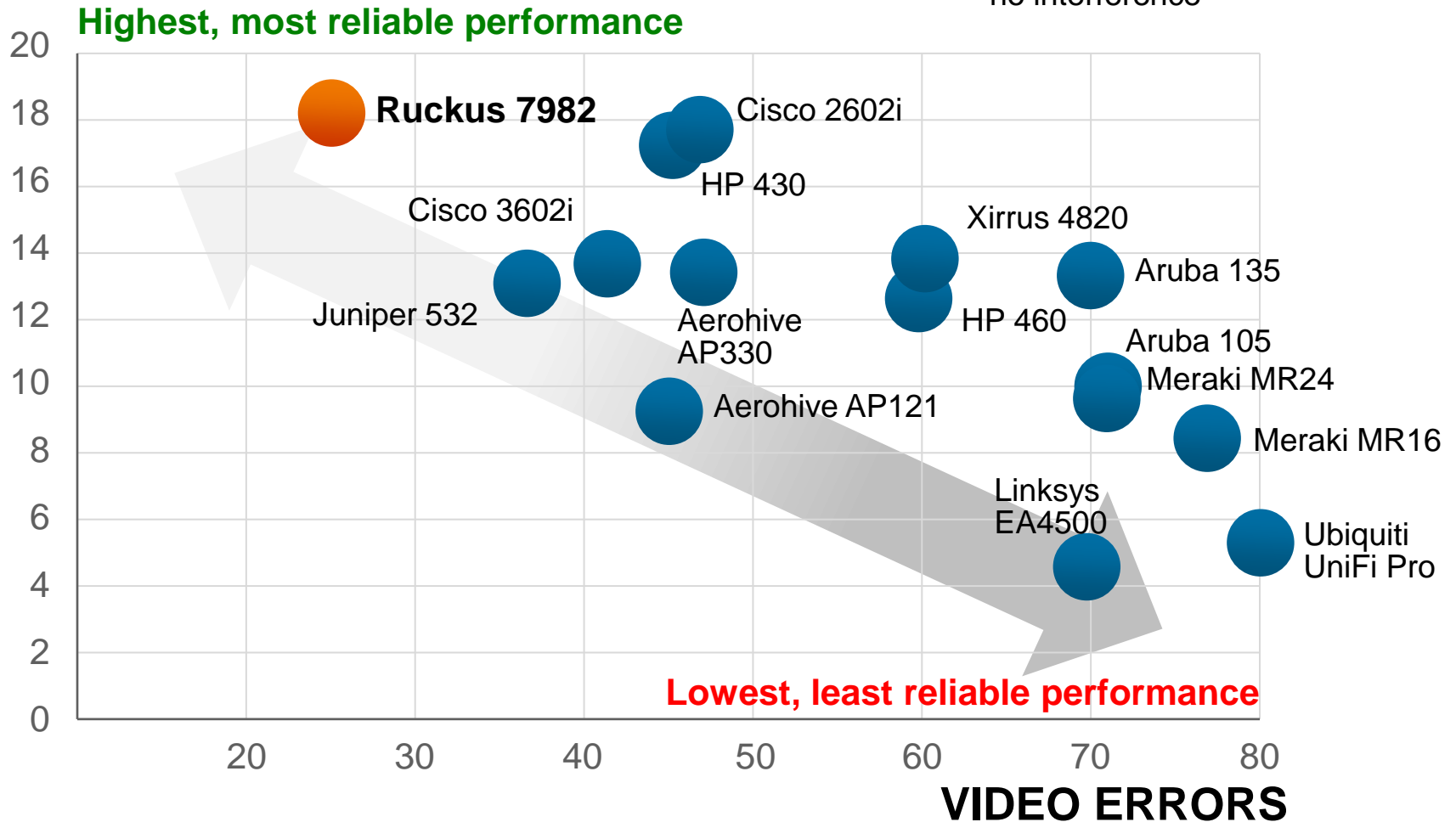
Ruckus

Making a BIG Difference

Measurements based on real-world customer Wi-Fi network

Before BeamFlex

4x CRD APs
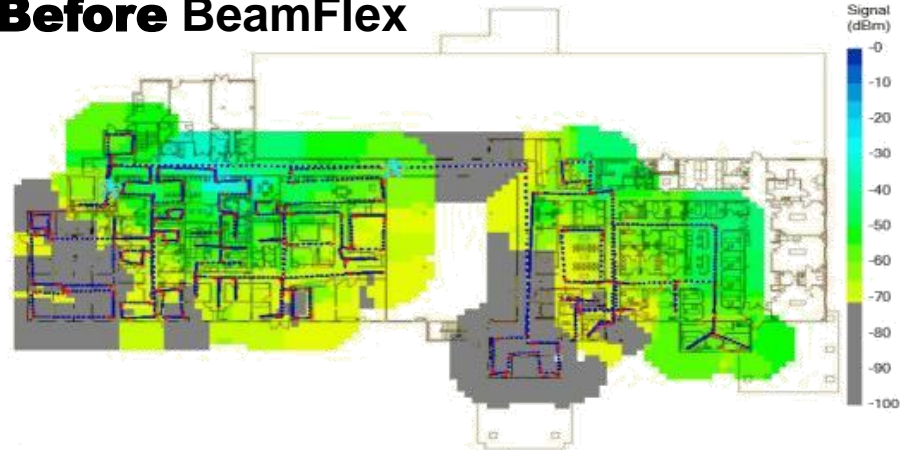
After BeamFlex
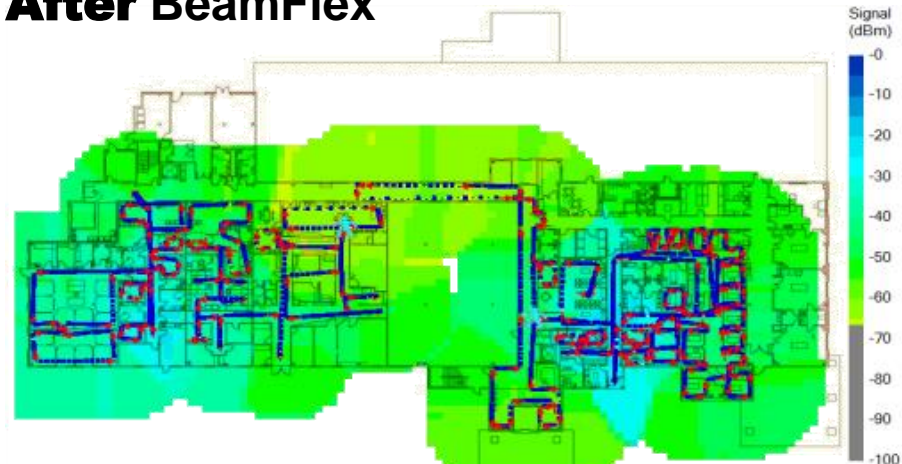
2x Ruckus 7363 APs

Green is good, grey is bad

ruckus

Truly lower TCO in practice

50% Lower cash costs

Conventional
Alternative

~50% less capex
and ongoing cash
maintenance costs

Ruckus

Annual (3x)

1x Capex

Representative Hospital Case Study
(Midwest Surgical)

80% Less technical staff time

Conventional
Alternative

~80% reduction in
technical staff time
required for WLAN
installation &
maintenance

Ruckus

Maintain

Troubleshoot

Deploy

Average results from sample of 40
Ruckus case studies

Ruckus
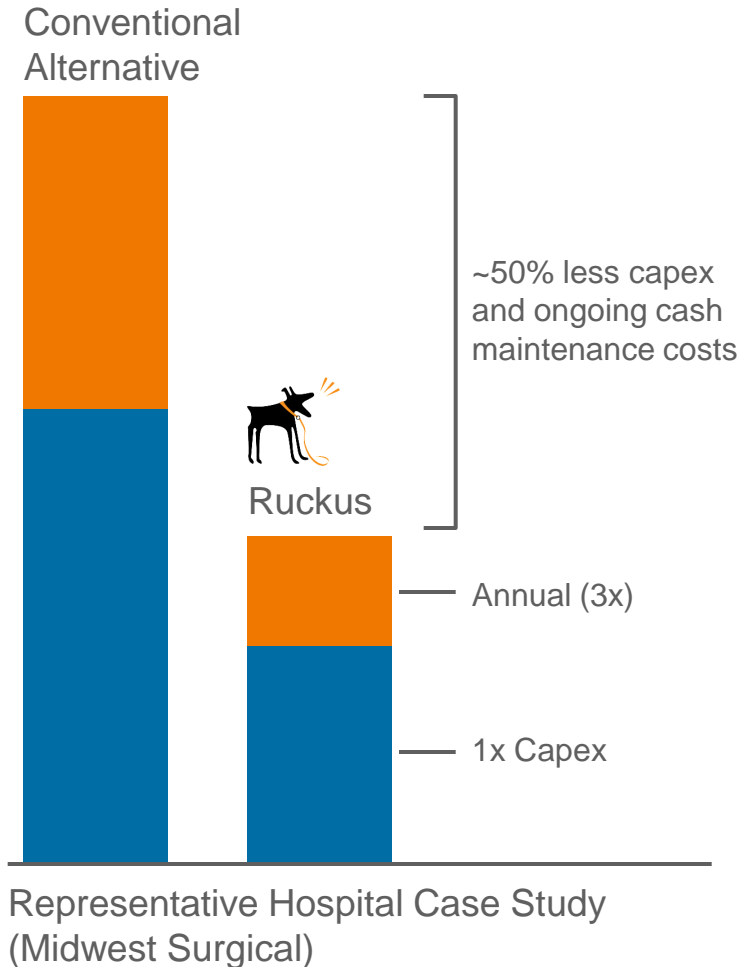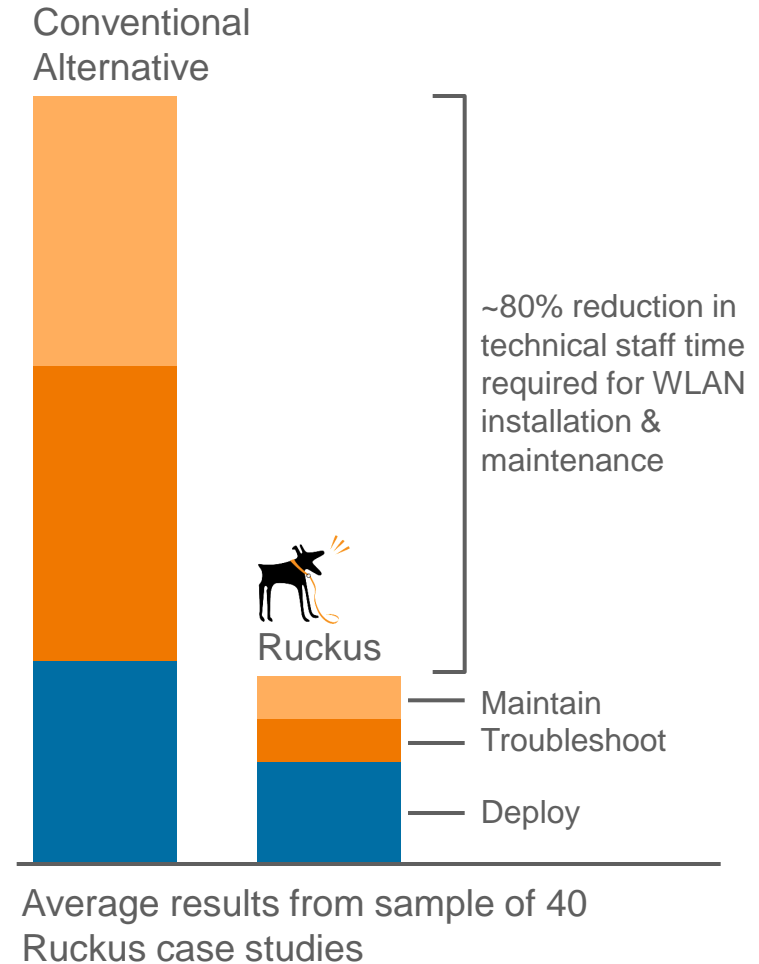
Enabling context-aware apps indoors

Total Traffic Profile

Employee Location

Mary ●

● Pedro

31 12 18 44%

Ingress/Egress

Customer Footstream
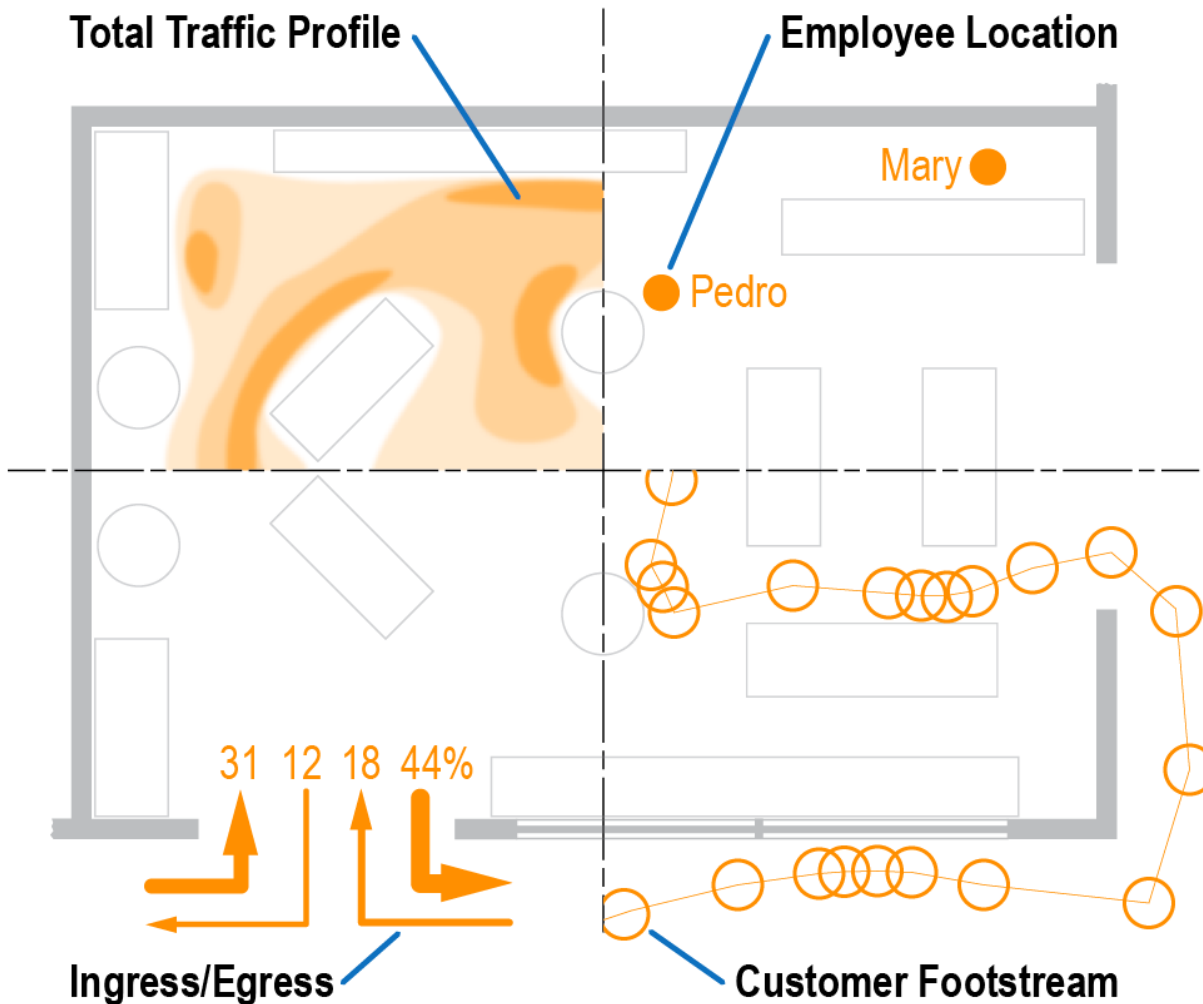
- o Personalized information delivery

- o Advanced loyalty programs

- o Catalyzing impulse buys

- o Friend- and staff-finder apps

- o Merchandizing optimization

- o Traffic-based monetization

- o Tying web and POS to physical activity (price comparisons, conversion)

- o Time and motion studies for operations re-engineering

- o Productivity management à la call centers

ruckus

Ruckus Smart Location: future of Wi-Fi

Third-party mobile apps

Ruckus SmartCell Insight for data warehousing and analytics feed
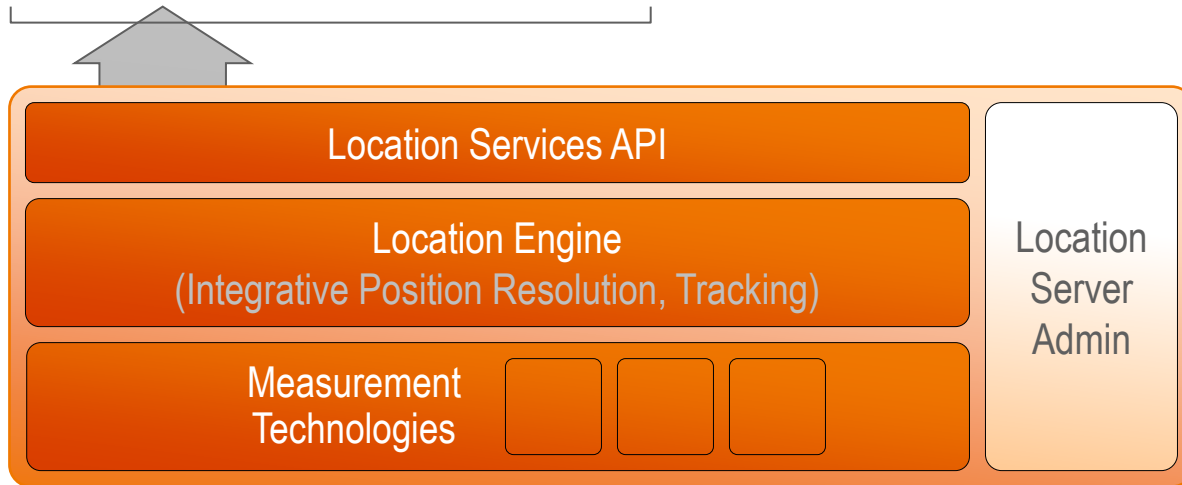
Ruckus Smart Location Server

Location Services API

Location Engine
(Integrative Position Resolution, Tracking)

Location Server Admin

Measurement Technologies

Module on SCG, VMWare Server, or in Cloud

Ruckus Smart Wi-Fi Network

Mobile Devices

o Software addition to Wi-Fi network

o 1 to 3m resolution

o Device independent (no client SW)

o Under venue/operator control

How Ruckus Wi-Fi helps you make more $

o Truly superior performance in practice

o Easier to deploy and use

o Lowest total cost of ownership

o Breaking ground for new opportunities

o 100% channel focus and strong partner support

which all mean...

o You win more deals

o You keep more of the margin you earn

o Customer references are stronger

o You can expand your business more easily into new growth areas

RUCKUS

Channel Marketing Update

September 2013

Anita Pandey & Kelly Liu
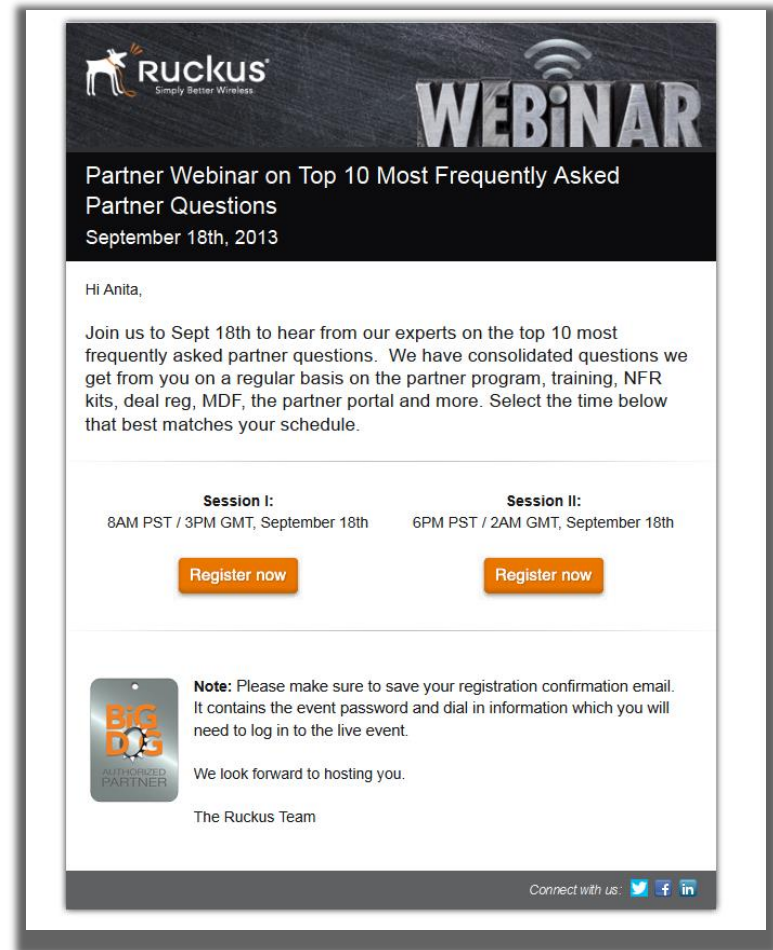
Channel Marketing Update

- **Reseller Webinar , Sept 18th –** "*Partnership Top 10 Most Frequently Asked Questions*"

  - Partner Program Requirements & Benefits
    - Training & Educational Events
    - NFR Kits
    - Deal Registration
    - MDF & Marketing Tools
  - Partner Portal Top 3 Tips
  - Key Sales Contacts
  - Partner Survey – what else would you like to see us cover?

- **Registration Links**
  - **8am PST**
  - https://ruckus.webex.com/ruckus/onstage/g.php?t=a&d=802898916
  - **6pm PST**
  - https://ruckus.webex.com/ruckus/onstage/g.php?t=a&d=804264404

NEW Highly Improved Deal Reg is Live!

- **Launched today**
  - Greatly improved UI
  - Step-by-step submissions workflow
  - More intuitive & flexible options for adding products

Categories

New Partner Portal

Deal Registration

Market Development Funds

Register a Deal

View Deals

◉ **Product Code**

◯ Hardware/License/Software etc.

◯ Support

Search

Register for New Deal

① End User Info → ② Project Info → ③ Build Your Project → ④ Submit Your Deal

Ruckus®
Simply Better Wireless.

Lead Generation Update

- **Weekly Prospect Webinars**
  - Generate ~ 50% of the warm leads!
  - Provide continuous education for VARs & customers
  - What we need from **YOU** to boost lead quality
    - Consistent lead status updates – feedback on our classifications of warm leads
    - Would you benefit from Regionally focused prospect webinars?

- **Automated email nurturing campaign:** multiple email touches to help accelerate buying cycle
  - Acquisition of sizeable global W & L & Assisted Living customer lists. Campaign in planning.
  - What we need from **YOU** to increase campaign relevance
    - Case Study volunteers?

LEADS (1000) — Stage 1 : Generate / Assign

PROSPECTS (100) — Stage 2 : Qualify / Convert

CUSTOMERS (10) — Stage 3 : Customer

Ruckus
Simply Better Wireless.
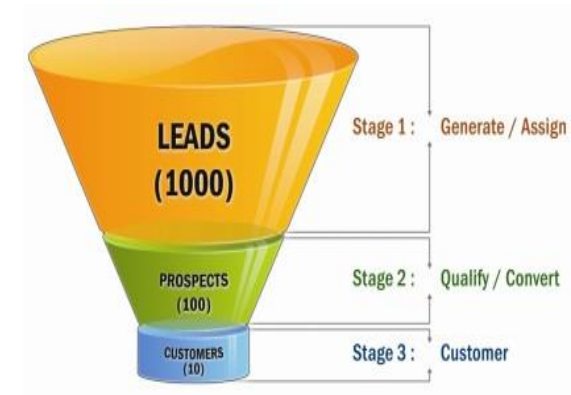
Ruckus Led-Lead Generation for Partners

Direct your customers to visit our webinar calendar:
www.ruckuswireless.com/press/webinars

Upcoming Prospect Webinars
- September 12: 11ac

- September 19: BYOD

- September 25: BYOD in partnership with Infonetics and Fluke Networks.

Archived, On-Demand Webinars
- Securing Public Hotspots
- 11ac
- Complete solution for education

LMS – Portal Intro Page Being Simplified for Relevancy

I'm a Partner	I'm a Customer	I'm an Employee

Big Dog Partner Training
Audience: Value-Added Resellers (VARs) and Distributors

Ruckus Wireless approved Big Dog Partners are required to successfully complete the certifications for Ruckus Sales Expert (REx) and WiSE Guy. We recommend that courses are completed prior to certification exam enrollment. There are some resellers and integrators that may have the requisite knowledge to pass the exam. The WiSE Guy certification has a duration of 2 years. The REx certification is perpetual.

All online supporting courses and online Ruckus Sales Expert Certification Exam is available to you for free. The WiSE Guy Certification Exam is $150.

Certifications:	Big Dog	Top Dog	**Expected Completion	Certificate period
WiSE Guy	*1	*2	3 months	2 years
Ruckus Sales Expert (REx)	*1	*3	3 months	Perpetual

*number of people with certification
**Expected completion time is from the date you are approved as a partner

Ruckus Sales Expert (REx) Courses:

- **Introduction to Ruckus Products (75 minutes)**
- **Sales Essentials (2 hours)**
- **REx Exam (30 minutes)**

New Page Launches Sept 18th!

WiSE Guy Exam Courses:

- **Wi-Fi Essentials (3 hours)**
- **ZoneDirector Installation and Management 9.3 (8.5 hours)**
- **Basic Wi-Fi Survey (90 minutes)**
- Upcoming **WiSE Bootcamp** instructor lead classes

Ruckus®
Simply Better Wireless.