EnGenius®

The Neutron Series

Distributed Network Management Solution

6 Nov 2015

Today's Networks Must Be -

Flexible, robust and as effective as the organizations they serve.

They Often Comprise:

- ✓ Different Buildings
- ✓ Business Units
- ✓ Infrastructures
- ✓ Sizes & Topologies

These **distributed networks** can place an enormous burden on in-house IT staff or managed service providers to support a potentially vast collection of Switches and Access Points through

- ✓ Installation
- ✓ Configuration
- ✓ Provisioning
- ✓ Managing
- ✓ Monitoring
- ✓ Upgrading

The Answer: The Neutron Series Distributed Network Management Solution

The Neutron Series

Distributed Network Management Solution

Flexible, Scalable, Enterprise-Class Management Solution for Both Large and Small Networks

Best of INTEROP 2015 Finalist

- Simplified Configuration & Management
- Enterprise-Class Performance
- Feature-Rich Access Points & WLAN Controller Switches
- **ez**Master™ Centralized Network Management
- NO AP Licensing, Subscription or Tech Support Fees

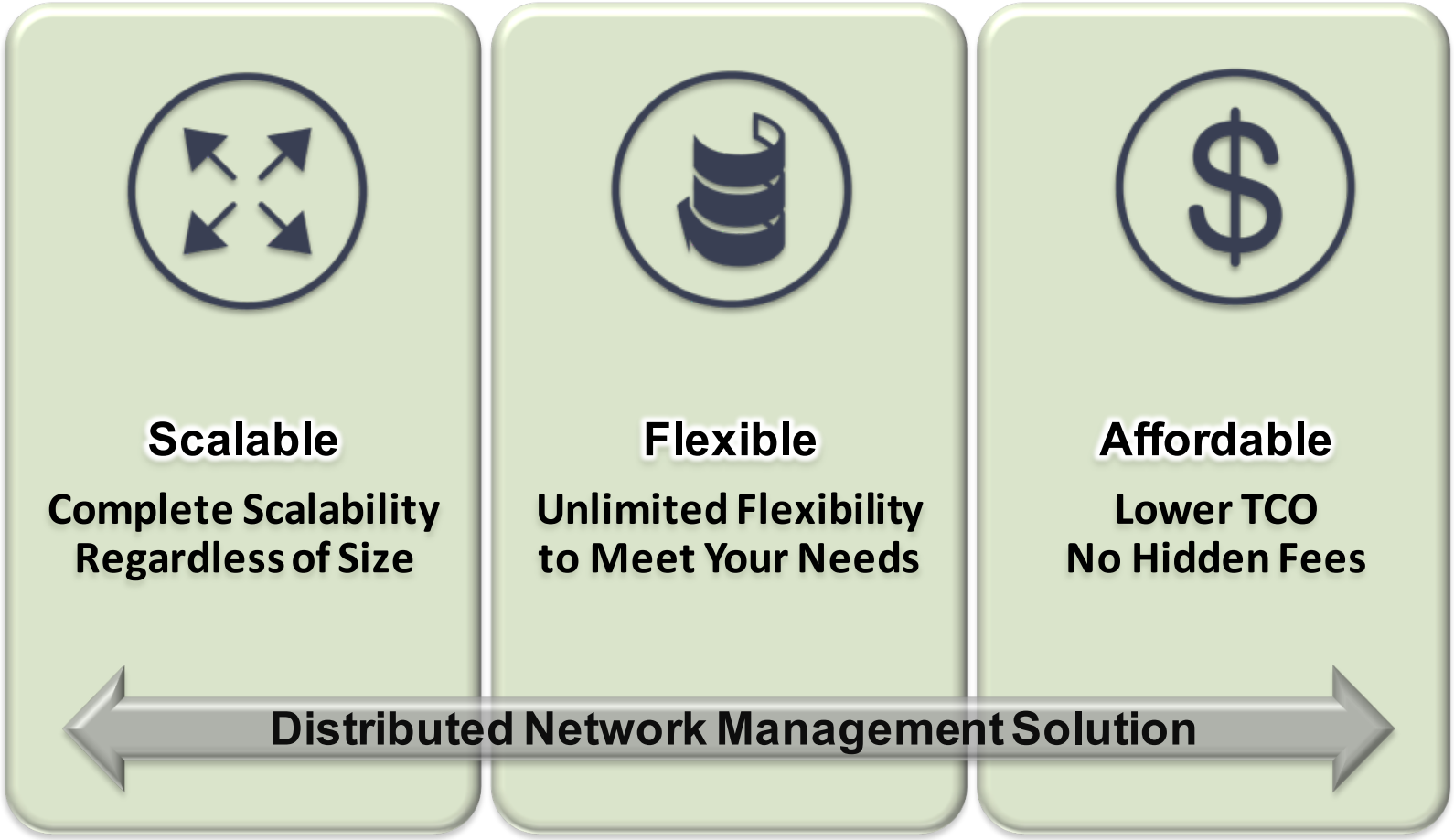
ezMaster™ **Network Management Software**

WLAN Controller Switches

Managed Access Points

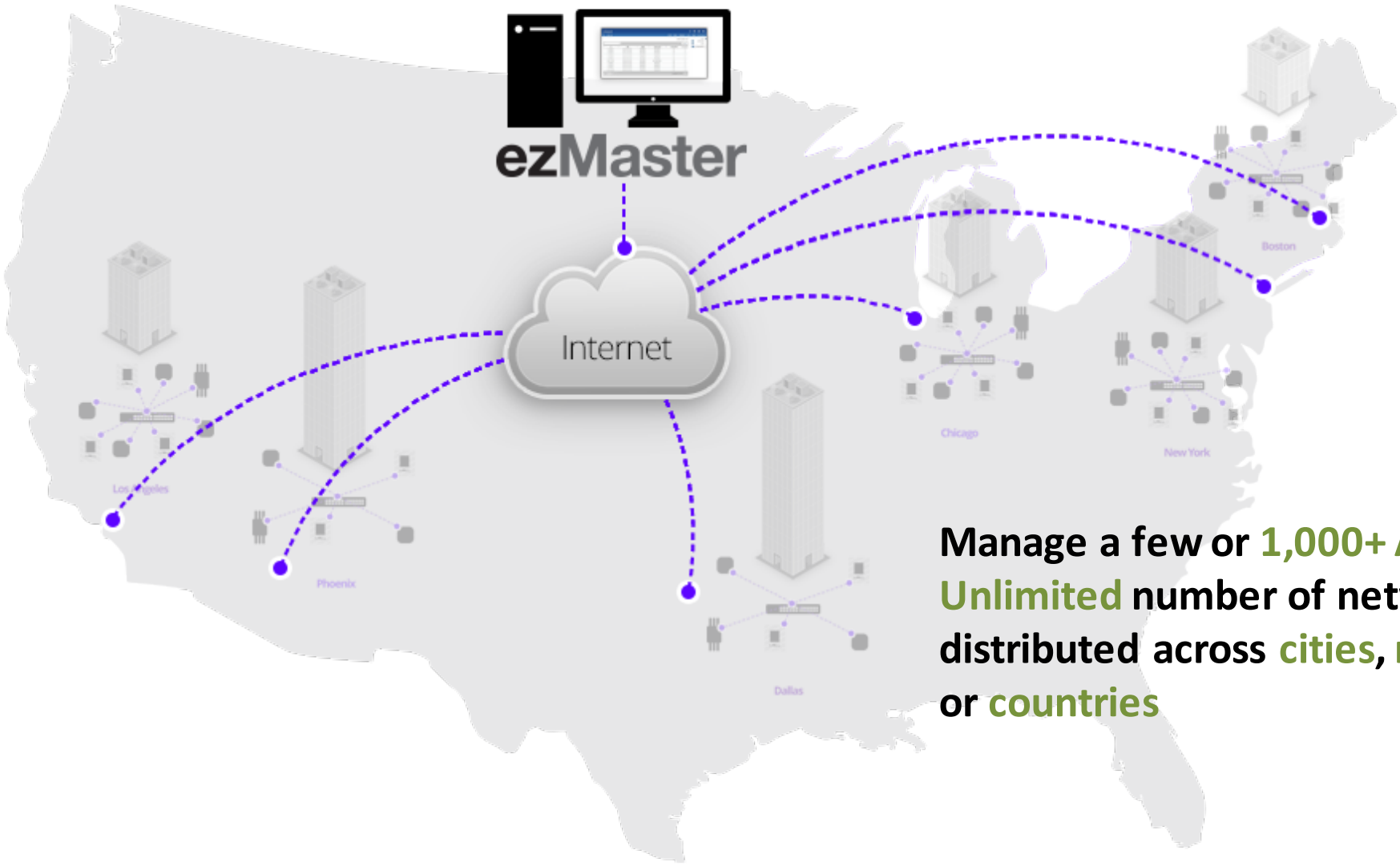
Neutron Series

Distributed Network Management Solution



Complete Scalability Regardless of Size

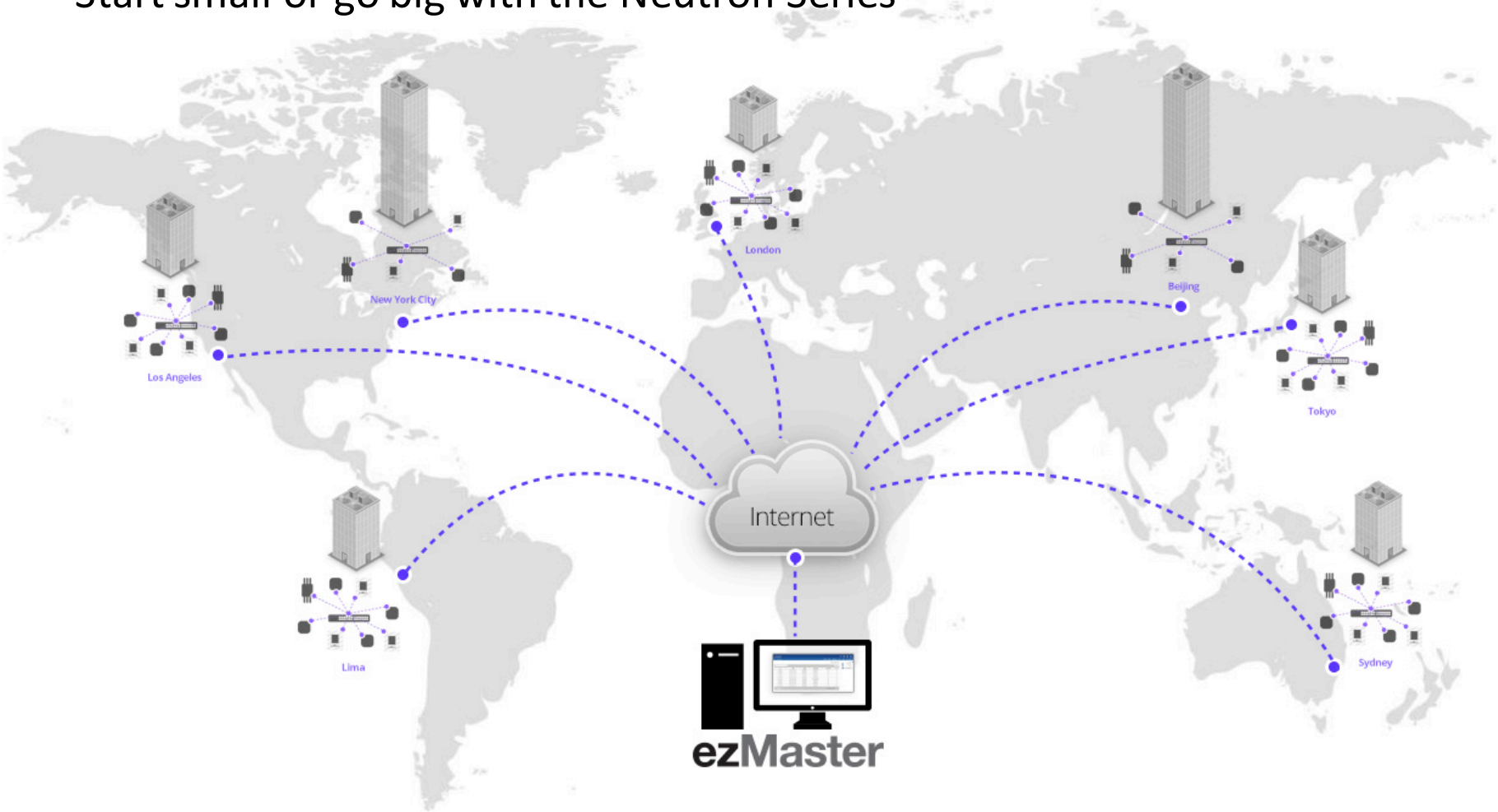
Start small or go big with the Neutron Series



Manage a few or 1,000+ APs, Unlimited number of networks distributed across cities, regions or countries

Complete Scalability Regardless of Size

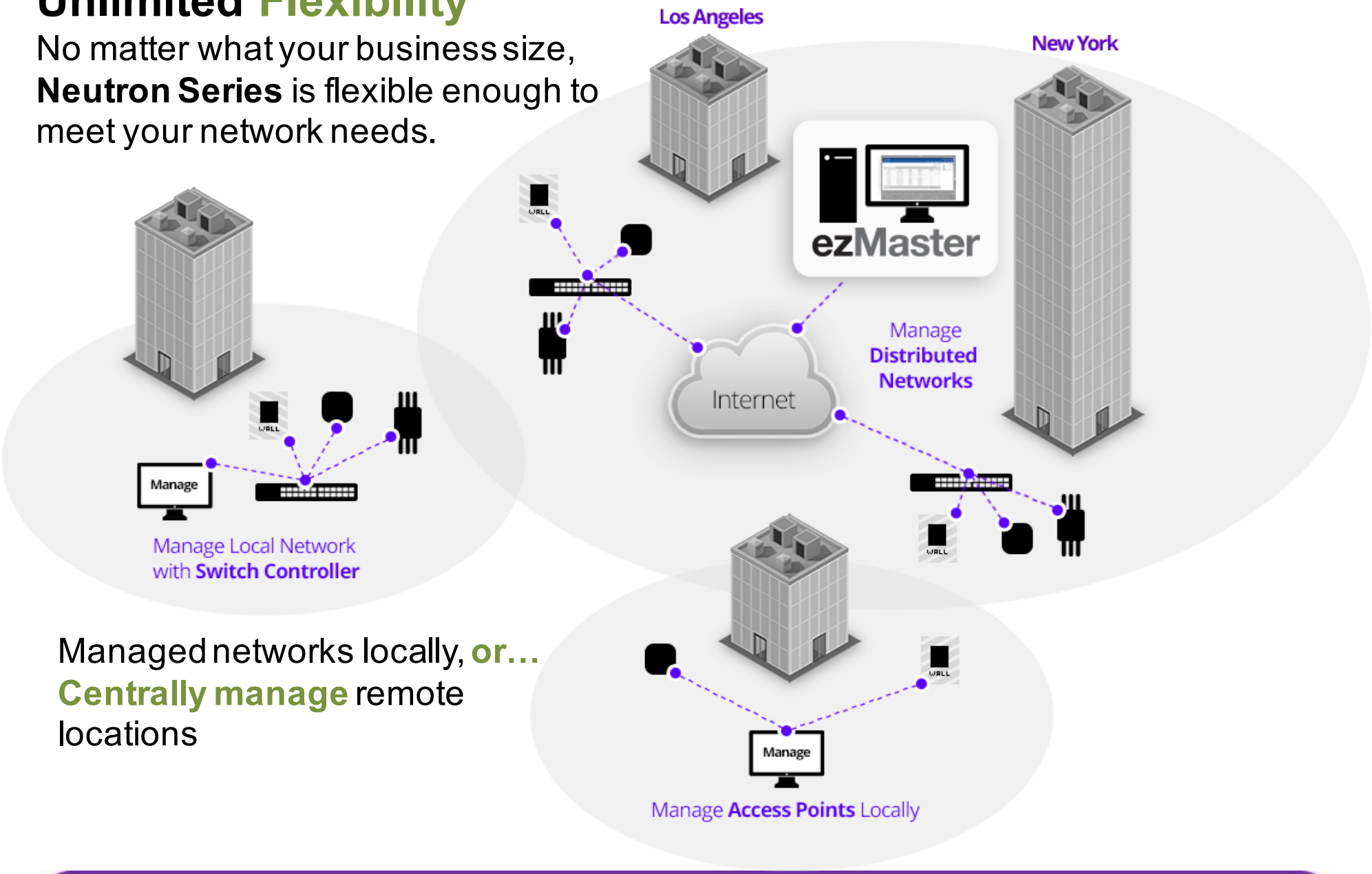
Start small or go big with the Neutron Series



Manage a few or 1,000+ APs, Unlimited number of networks distributed across cities, regions or countries

Unlimited Flexibility

No matter what your business size, **Neutron Series** is flexible enough to meet your network needs.



Managed networks locally, **or…**
Centrally manage remote locations

Enjoy Greater **Affordability**

Many competing solutions require costly hardware, per AP licensing and annual subscription fees, not so with Neutron Series. Enjoy affordable, predictable costs – and a lower TCO per deployment.

The Price Paid over One Year for 25 APs

Compare	EnGenius Hybrid Solution	Controller-based Vendor	Cloud-based Vendor
Access Points	11ac 3x3 : 3 Streams EWS360AP $599	11ac 3x3 : 3 Streams $795	11ac 3x3 : 3 Streams $1,399
HW Controller	0	1	0
Subscription	0	0	$3,750 per year
License	0	$4,000	0
Firmware Upgrade	0	$3,600	0
Total Cost (USD)	**$14,975**	**$27,475**	**$38,725**

MSRP October 2015 – Not including cost of power sources and Ethernet switch.

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Target Audience, Solution Features & Benefits

Target Audience

Neutron Series Is Ideal for Deployment in Expandable Environments:

MSPAlliance® Est. 2000
International Association of Cloud and Managed Service Providers

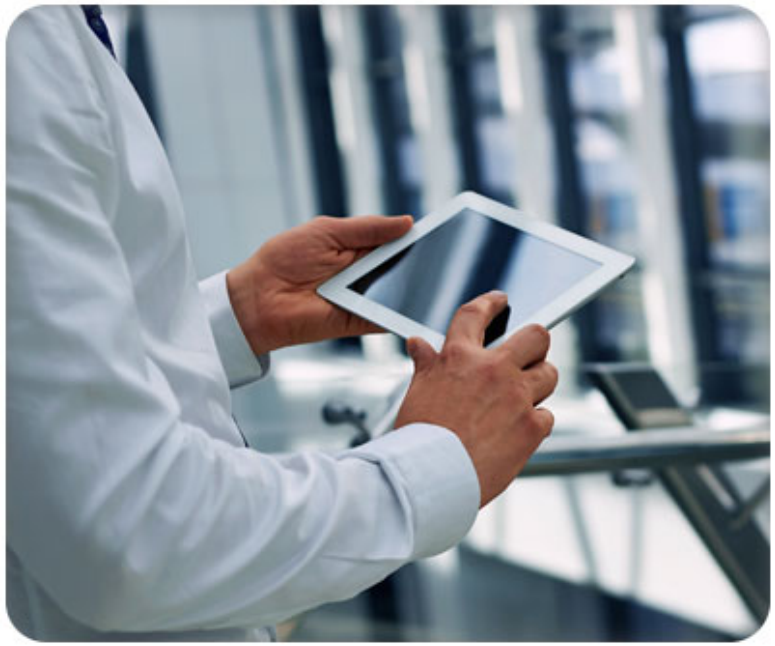
-Large, geographically diverse organizations
-Managed Service Providers (MSPs)
-Healthcare Facilities
-Hotels & Resorts
-School Districts & Campuses
-Public Sector
-ProAV Installations

Features & Benefits

The Neutron Series delivers enterprise-class features that simplify deployment and management, maximizing wireless performance for any size network, no matter where it's located.

Optimized Wireless Performance

- ✓ Background Scanning
- ✓ Auto-Transmit Power
- ✓ Auto-Channel Allocation
- ✓ Fast Roaming
- ✓ Band Steering
- ✓ Band Balancing



ezMaster™ makes centralized network management easy through bulk configuration, provisioning and monitoring; rich analytics, reporting and much more.

Distributed Control, Centralized Management with ezMaster

- ✓ Unlimited Distributed Networks
- ✓ At-A-Glance Dashboard
- ✓ Manage 1,000+ APs & Switches
- ✓ Manage 10,000+ Concurrent Users
- ✓ Monitor with or without Onsite Switch
- ✓ Deploy on a Local or Remote Server or via a Cloud-Based* Service

Save Time & Resources

The Neutron Series is easy to deploy, manage and operate, so you'll spend less on administrative overhead, travel costs and training.

Simplified Deployment & Provisioning

- ✓ Easy-to-Use Web Interface
- ✓ Simplified Management
- ✓ One-Click Updates
- ✓ Automated AP Provisioning
- ✓ Intuitive Configuration Tools
- ✓ No Extensive Learning Curve

A powerful, full-featured platform, **Neutron Controller Switches** support up to 50 Access Points and provide for future expandability for broader device connectivity and management.

Neutron Controller Switches, A Full-Featured WLAN Platform

- ✓ Manage up to 50 Neutron APs
- ✓ Power-over-Ethernet Support
- ✓ Redundant AP Management with SmartSync Redundancy*
- ✓ Future Expandability
- ✓ Wireless Controller
- ✓ Array of Layer 2 Management Tools

*Feature available through future firmware updates

Versatile AP Portfolio Features High-Capacity 11AC

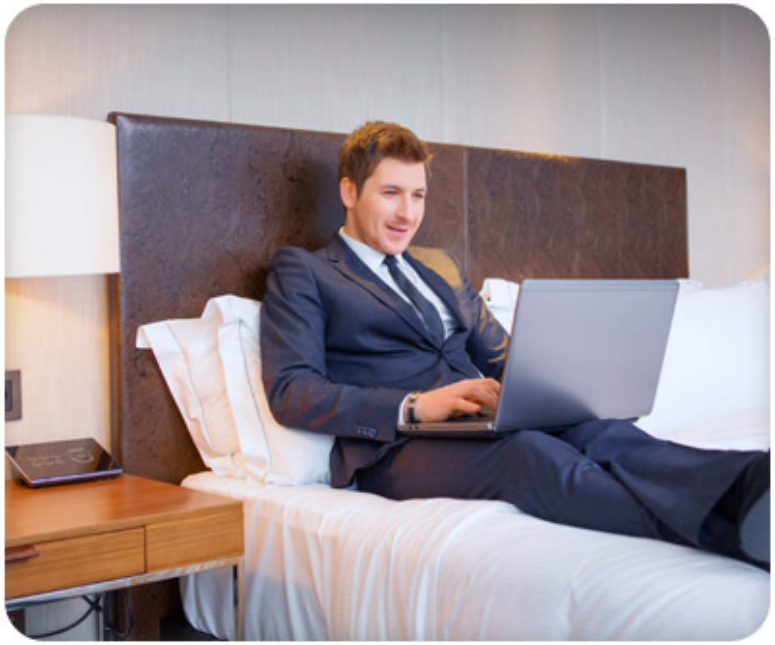
Neutron Series' versatile line of high-performance, **Managed Access Points** features high-capacity 11ac Indoor and Outdoor APs.

Versatile AP Portfolio

- ✓ Indoor Ceiling-Mount
- ✓ Outdoor Ruggedized
- ✓ Single-Band 11n models to
- ✓ 3x3 Dual-Band 11ac versions
- ✓ PoE Convenience
- ✓ Standalone Devices or
- ✓ Managed via Switch or ezMaster

Increased Security, Reliability & Bandwidth Conservation

Organizations that offer Internet access to patrons or visitors - notably hotels, retail shops and restaurants - will appreciate Neutron's Captive Portal and Guest Network capabilities.



Create Secure, Branded Captive Portals & Guest Networks

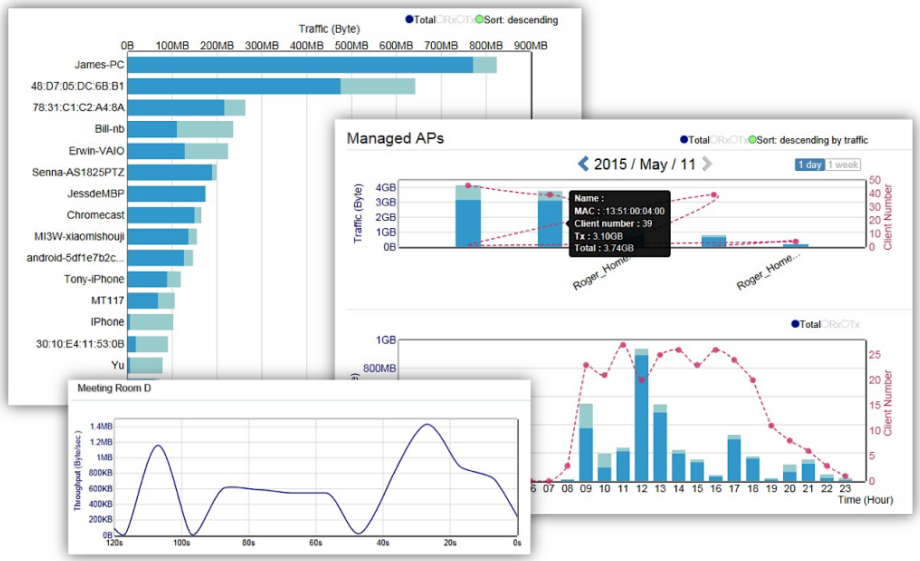
- ✓ Offer Secure, Regulated Web Usage
- ✓ Authentication Database
- ✓ Customizable Branded Splash Pages
- ✓ Provide Promotional Content
- ✓ Acceptable Guest Usage Policies
- ✓ Block Access to Corporate Network
- ✓ Create Separate VLANs

With the Neutron Series, your **network is protected** from attacks at multiple levels through advanced wireless encryption standards and threat detection.

Comprehensive Network Protection

- ✓ Wi-Fi Protected Access Encryption
- ✓ Authentication Database
- ✓ 802.1X with Radius Server
- ✓ Rogue AP Detection
- ✓ Email Alerts
- ✓ Real-Time Wireless Invasion Monitoring

Neutron provides centralized network visibility and a wealth of invaluable reporting, analytics and real-time monitoring tools, with email alerts, giving IT managers insight into system efficiencies and issues.



Rich Reporting & Analytics

- ✓Email Alerts
- ✓Wireless Client Monitoring
- ✓Traffic & Usage Statistics
- ✓Centralized Network Visibility
- ✓View Statistics
- ✓Network Topology View
- ✓Floor Plan & Google® Map Views

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Competitive Information

AP & Switch Management

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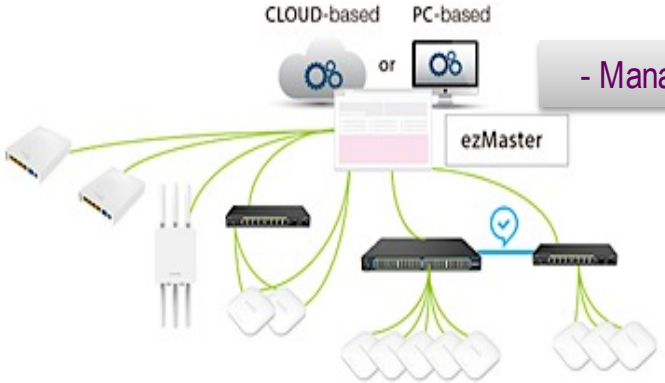
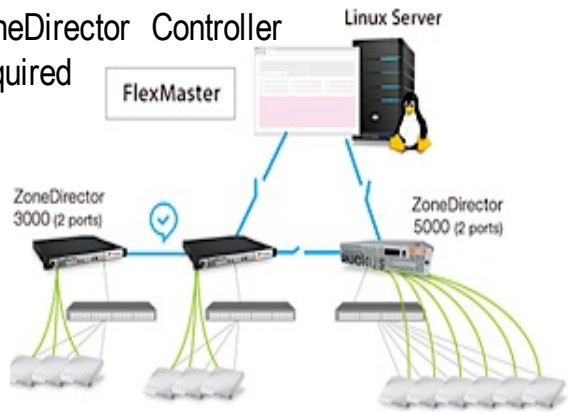


- Manage by both Switches & ezMaster

- Redundancy between Switch & ezMaster = SmartSync Redundancy*
- AND between **any** Neutron Switch = ezRedundancy*

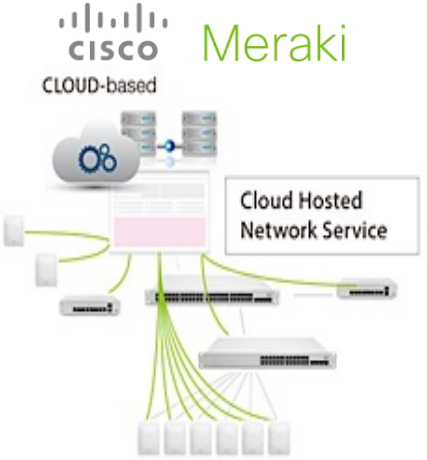
Ruckus Simply Better Wireless.

- Manage by ZoneDirector Controller
- License fee required



- No redundancy between FlexMaster & ZoneDirector
- Only between two of the **same** ZoneDirector Controllers

cisco Meraki



- Directly manage by Meraki Cloud datacenters built around the world

*Feature available through future firmware updates

Competitive High Level Matrix – Neutron vs. Competition

	EnGenius	Ruckus	Meraki
Management	Hybrid (Cloud or Controller)	Controller-based	Cloud-based
AP License/Subscriptions	None	✓	✓
Auto Channel Selection	✓	✓	✓
Auto TX Power	✓	✓	✓
Background Scanning	✓	✓	✓
Captive Portal	✓	✓	✓
One Click Update	✓	✓	✓
Auto Migration	✓	✓	✓
Comprehensive Monitoring	✓	✓	✓
Remote Management	✓	✓	✓
1,000+ APs	✓	✓	✓

EnGenius competes head to head with other major competitors

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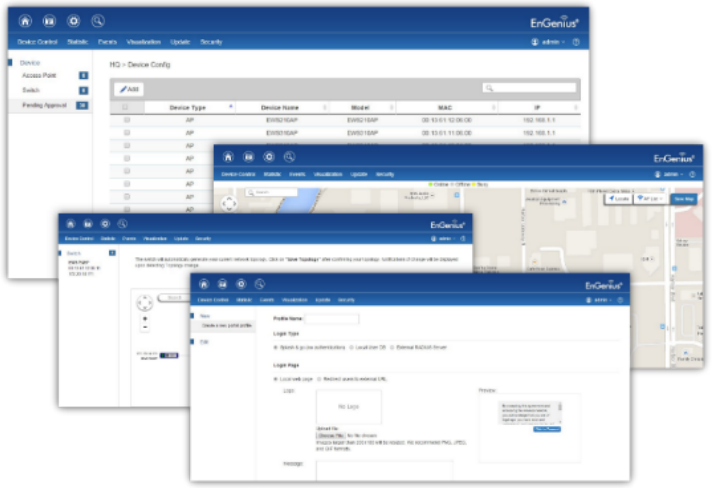
ezMaster
Network Management Software

ezMaster Network Management Software expands the flexibility and scalability of Neutron Series Managed Access Points and WLAN Controller Switches.

Best of INTEROP 2015 Finalist

ezMaster™



Flexible Distributed Network Management

- ✓ Unlimited Distributed Networks
- ✓ Powerful, Scalable Options
- ✓ Simplified Device Management
- ✓ Deploy on a Local or Remote Server or via a Cloud-Based* Service

*Feature available through future firmware updates

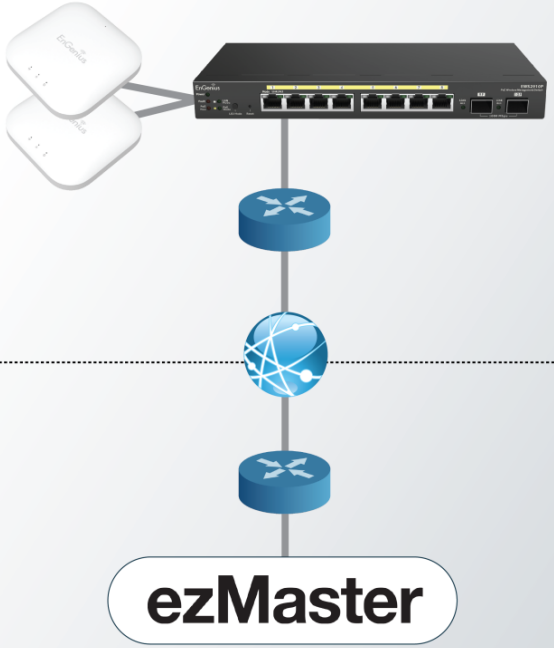
ezMaster Deployment Options

1

Manage Local Network

2

Manage Remote Network



3

Manage Local and Remote Networks

Remote Network

Local Network

ezMaster Software Feature List

Centralized Management

- Configure, manage and monitor thousands of Neutron devices
- Cross-Network AP Management
- AP Group Configuration

AP Config & Management

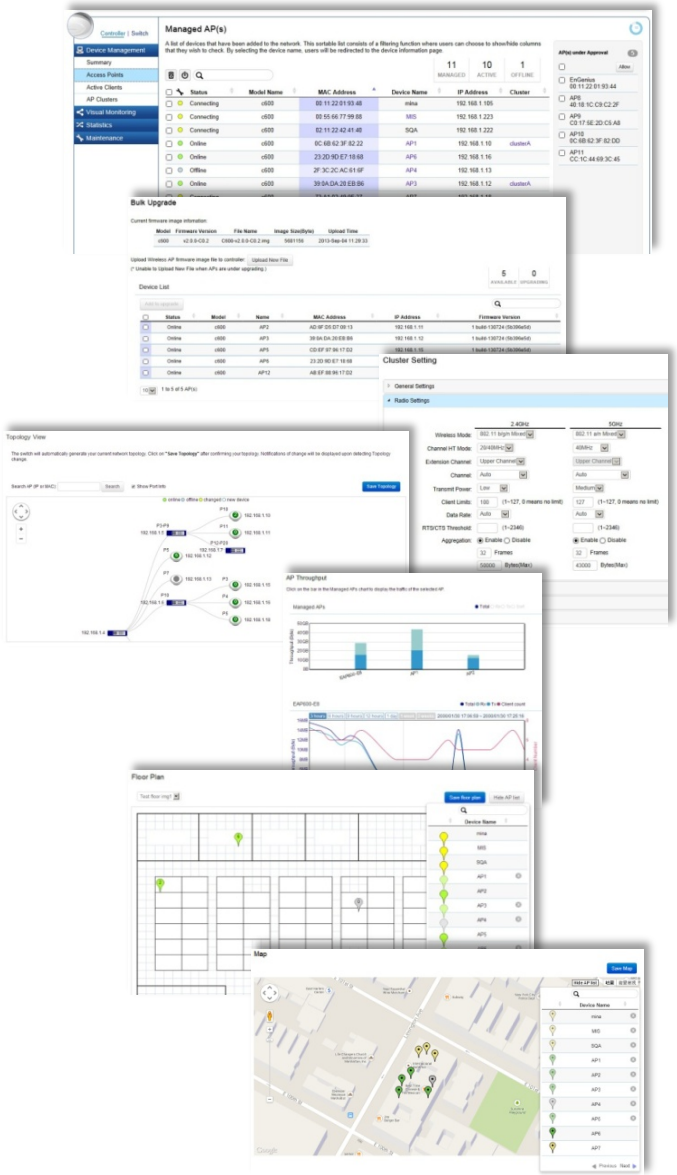
- Auto Channel Selection
- Auto Tx Power
- Client Limiting
- Client Isolation
- L2 Isolation
- VLAN Isolation
- VLAN Tag
- Traffic Shaping
- Fast Roaming
- Band Steering
- RSSI Threshold
- Multiple SSID
- Secure Guest Network
- LED On/Off Control
- Background Scanning

Comprehensive Monitoring

- System Status Monitoring
- Device Status Monitoring
- Wireless Client Monitoring
- Wireless Traffic and Usage Statistics
- Visual Topology View
- Floor Plan View
- Wireless Coverage Display
- Map View
- Rogue AP Detection

Management & Maintenance

- Kick/Ban Clients
- Captive Portal
- Seamless Migration
- One-Click Update
- Bulk Firmware Upgrade
- WiFi Scheduling*
- Syslog
- Remote Logging
- E-Mail Alert
- SmartSync Redundancy*
- ezRedundancy* (N+1)



*Available through future software upgrade.

ezMaster System Requirements

Recommended environment for managing up to 500 APs

- CPU: Intel i3 3.6GHz dual core or above
- RAM: 4GB minimum
- HDD: 500GB (actual requirement depending on log size)
- OS: Microsoft Windows 7 or later + VirtualBox 4.3.30 (or similar virtualization products)

Recommended environment for managing up to 1000 APs

- CPU: Intel i5 3.2GHz quad core or above
- RAM: 4GB minimum
- HDD: 500GB (actual requirement depending on log size)
- OS: Microsoft Windows 7 or later + VirtualBox 4.3.30 (or similar virtualization products)

Network Topology Requirements

•At sites where APs are deployed: a DHCP enabled network for APs to obtain IP address

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Neutron Series Hardware

Neutron Series WLAN Controller Switches

NEW **EWS2910P** 8-Port Gigabit PoE+ L2 Wireless Management Switch/Controller with 2 Dual-Speed SFP ports; **61w**

NEW **EWS2910P-KIT-300** WLAN Starter Kit (1) EWS2910P, (2) EWS300APs

EWS5912FP 8-Port Gigabit PoE+ L2 Wireless Management Switch with 2 GbE Ports and 2 Dual-Speed SFP; **130w**

EWS7928P 24-Port Gigabit PoE+ L2 Wireless Management Switch with 4 Dual-Speed SFP; **185w**

EWS7928FP 24-Port Gigabit PoE+ L2 Wireless Management Switch with 4 Dual-Speed SFP; **370w/740w** (with RPS)

EWS7952FP 48-Port Gigabit PoE+ L2 Wireless Management Switch with 4 Dual-Speed SFP; **740w**

Model	Max APs Supported	RJ45	SFP	PoE Standard	PoE Ports	PoE Budget	Housing
EWS2910P	20	8	2	af	8	61.6w	1U 9.45" Desktop
EWS5912FP	50	10	2	af/at	8	130w	1U 13" Rack-mountable
EWS7928P	50	24	4	af/at	24	185w	1U 19" Rack-mountable
EWS7928FP	50	24	4	af/at	24	370w/740w	1U 19" Rack-mountable
EWS7952FP	50	48	4	af/at	48	740w	1U 19" Rack-mountable

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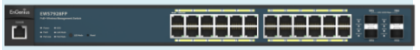
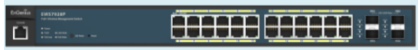
Neutron Controller Switches

 EWS2910P	 EWS5912FP	 EWS7928P	 EWS7928FP	 EWS7952FP
Manage **20** APs	Manage **50** APs			
8 GbE Ports	**10** GbE Ports	**24** GbE Ports		**48** GbE Ports
2 x 1G SFP Uplink		**4 x 1G** SFP Uplink		
8P PoE af (61.6W)	**8P** PoE af/at (130W)	**24P** PoE af/at (185W)	**24P** PoE af/at (370W)	**24P** PoE af/at (740W)
20 Gbps switching	**24** Gbps switching	**56** Gbps switching		**104** Gbps switching
Desktop	**13”** 1U Rackmount	**19”** 1U Rackmount		

Neutron Managed Wireless Access Points

Neutron Series' versatile line of high-performance,

Managed Access Points features 5 new APs.

- ✓ EWS300AP
- ✓ EWS350AP
- ✓ EWS500AP
- ✓ EWS510AP
- ✓ EWS650AP

Product No.	Wireless Standard	Product Description
EWS300AP	802.11b/g/n	Single-Band 11n 2x2:2 2.4 GHz Ceiling-Mount Wireless Managed Indoor AP
EWS310AP	802.11a/b/g/n	Dual-Band 11n 2x2:2 Ceiling-Mount Wireless Managed Indoor AP
EWS320AP	802.11a/b/g/n	Dual-Band 11n 3x3:3 Ceiling-Mount Wireless Managed Indoor AP
EWS350AP	802.11a/b/g/n/ac	Dual-Band 11ac 2x2:2 Ceiling-Mount Wireless Indoor AP
EWS360AP	802.11a/b/g/n/ac	Dual-Band 11ac 3x3:3 Ceiling-Mount Wireless Managed Indoor AP
EWS500AP	802.11b/g/n	Single-Band 11n 2x2:2 Wall Plate Wireless Managed Indoor AP
EWS510AP	802.11a/b/g/n	Dual-Band 11n 2x2:2 Wall Plate Wireless Managed Indoor AP
EWS650AP	802.11	Dual-Band 11ac 2x2:2 Wireless Managed Outdoor AP; IP55
EWS660AP	802.11a/b/g/n/ac	Dual-Band 11ac 3x3:3 Wireless Managed Outdoor AP; IP55
EWS860AP	802.11a/b/g/n/ac	Dual-Band 11ac 3x3:3 Wireless Ruggedized Managed Outdoor AP; IP68

Neutron Managed Wireless Access Points

EWS300AP

EWS310AP

EWS320AP

EWS350AP

EWS360AP

EWS650AP

EWS660AP

EWS860AP

Indoor					Outdoor IP55		Outdoor IP68
Single Band	Dual Band 802.11n		Dual Band 802.11n/ac				
Internal Antenna							Ext.Antenna
2 x 2 : 2 300 Mbps High Power	2 x 2 : 2 300 + 300 Mbps High Power	3 x 3 : 3 450 + 450 Mbps High Power	2 x 2 : 2 300 + 867 Mbps High Power	3 x 3 : 3 450 + 1300 Mbps High Power	2 x 2 : 2 300 + 867 Mbps High Power	3 x 3 : 3 450 + 1300 Mbps High Power	
1 x GbE Uplink					1 x GbE Uplink 1 x GbE LAN		1 x GbE Uplink 1 x GbE LAN(PSE)
Support 802.3af/at PoE		Support 802.3at PoE					
0 to 40 ° C					-20 to 60 ° C		

Neutron Managed Wall Plate Access Points

	EWS500AP	EWS510AP
		
	Indoor	
	Single Band	Dual Band 802.11n
	Internal Antenna	
	2 x 2 : 2 **300** Mbps	**2 x 2 : 2** **300 + 300** Mbps
	1 x GE Uplink **4** x FE LAN (1 x PoE Out)	
	Support 802.3af/at PoE	
	0 to 40° C	

EnGenius®

Total Networking Solution Provider

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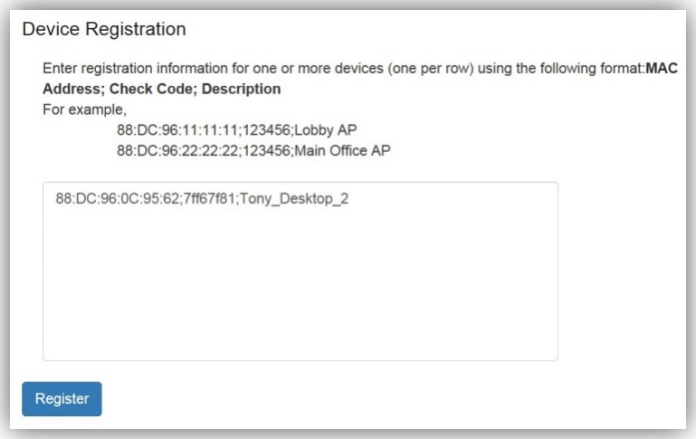
APPENDIX A: FEATURE HIGHLIGHTS

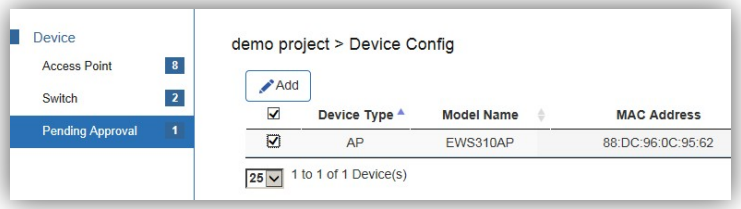
3 Simple Steps Getting APs Connected to ezMaster

1



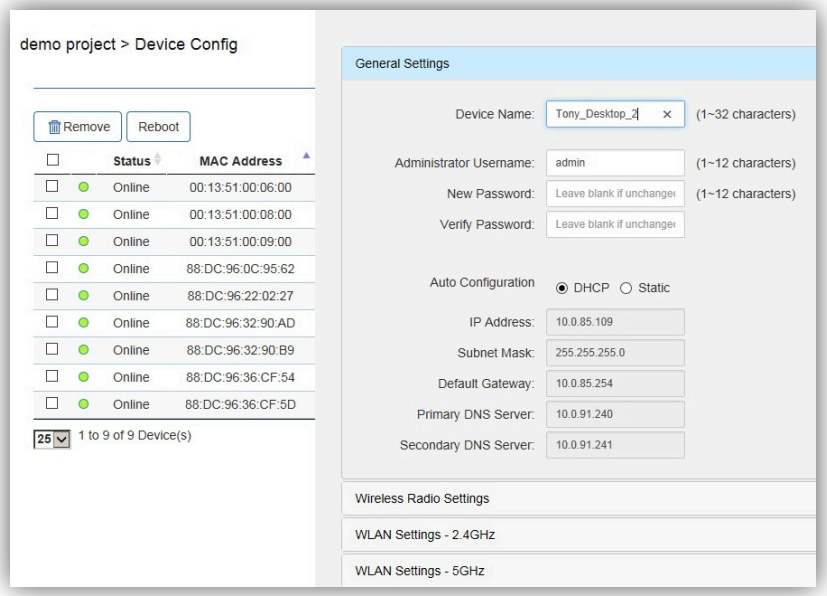
Claim AP using MAC Address + Check Code

2



Add claimed AP to Profile

3



Start managing and configuring your APs!

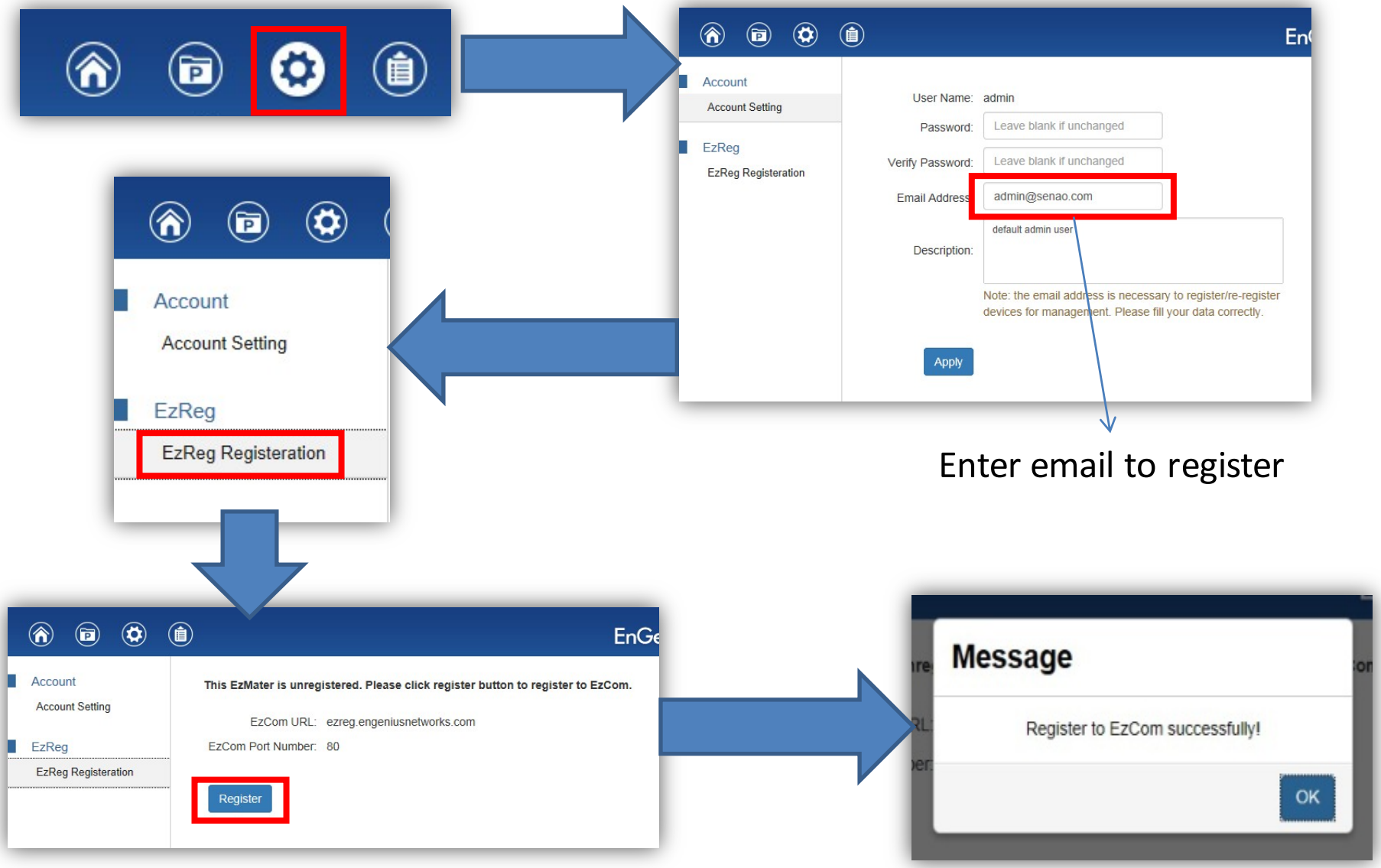
Where to find the Check Code?

In order to register the Neutron device with the ezMaster for remote management, the Check Code and MAC Address of the device must be entered. The Check Code can be found:

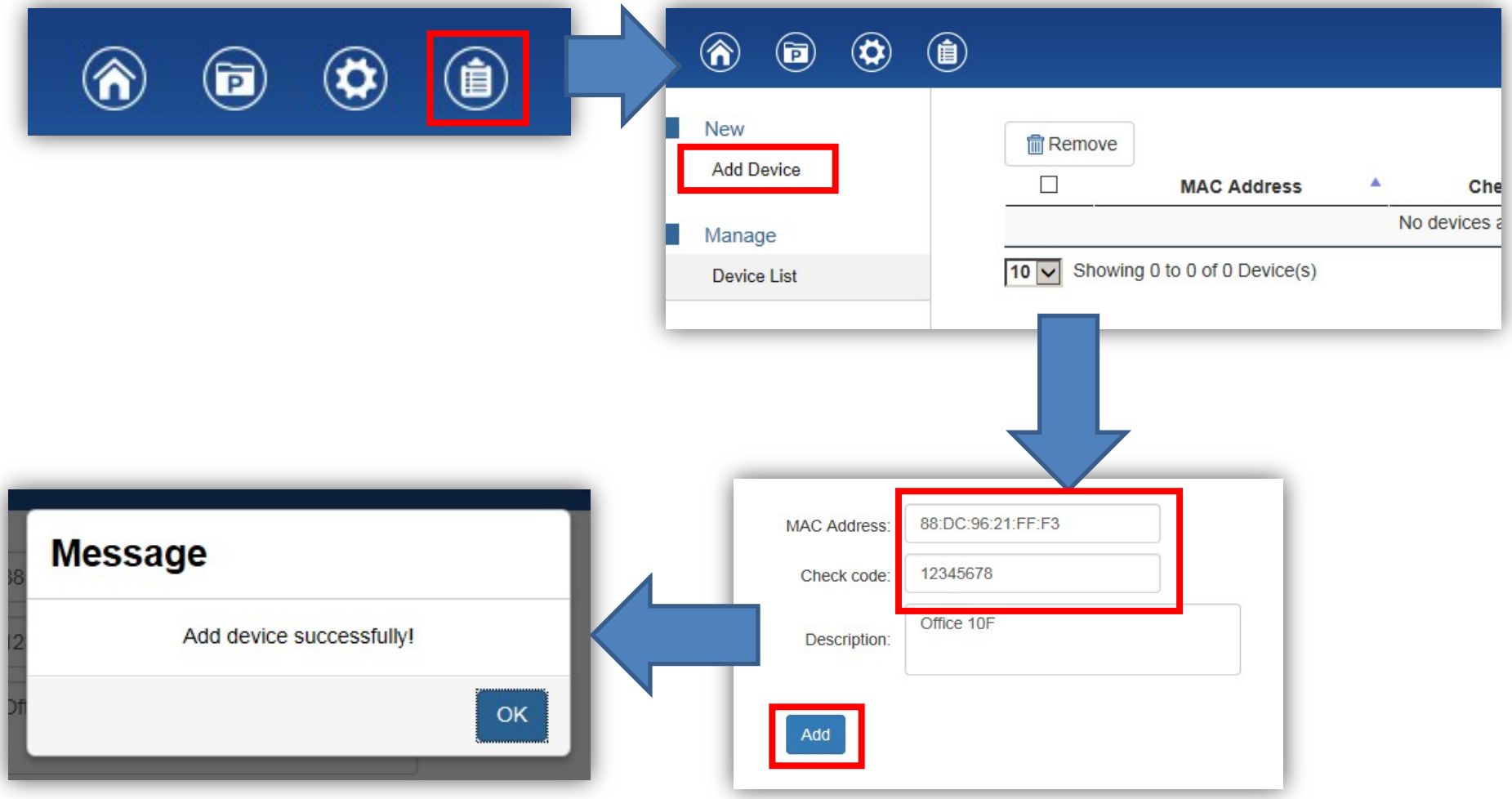
- On the device label at the bottom of each device (shipped after Oct 2015)
- In the *Summary* or *Status* page in the device user interface
- Using the *Generate Check Code* feature on the EWS Switch (*Maintenance > Check Code*)
- Along with every EWS AP/Switch shipment, HQ sales will provide a list of SN, MAC Address, Check Code

ezMaster Registeration

Register ezMaster to the ezReg server in order manage remote Access Points.

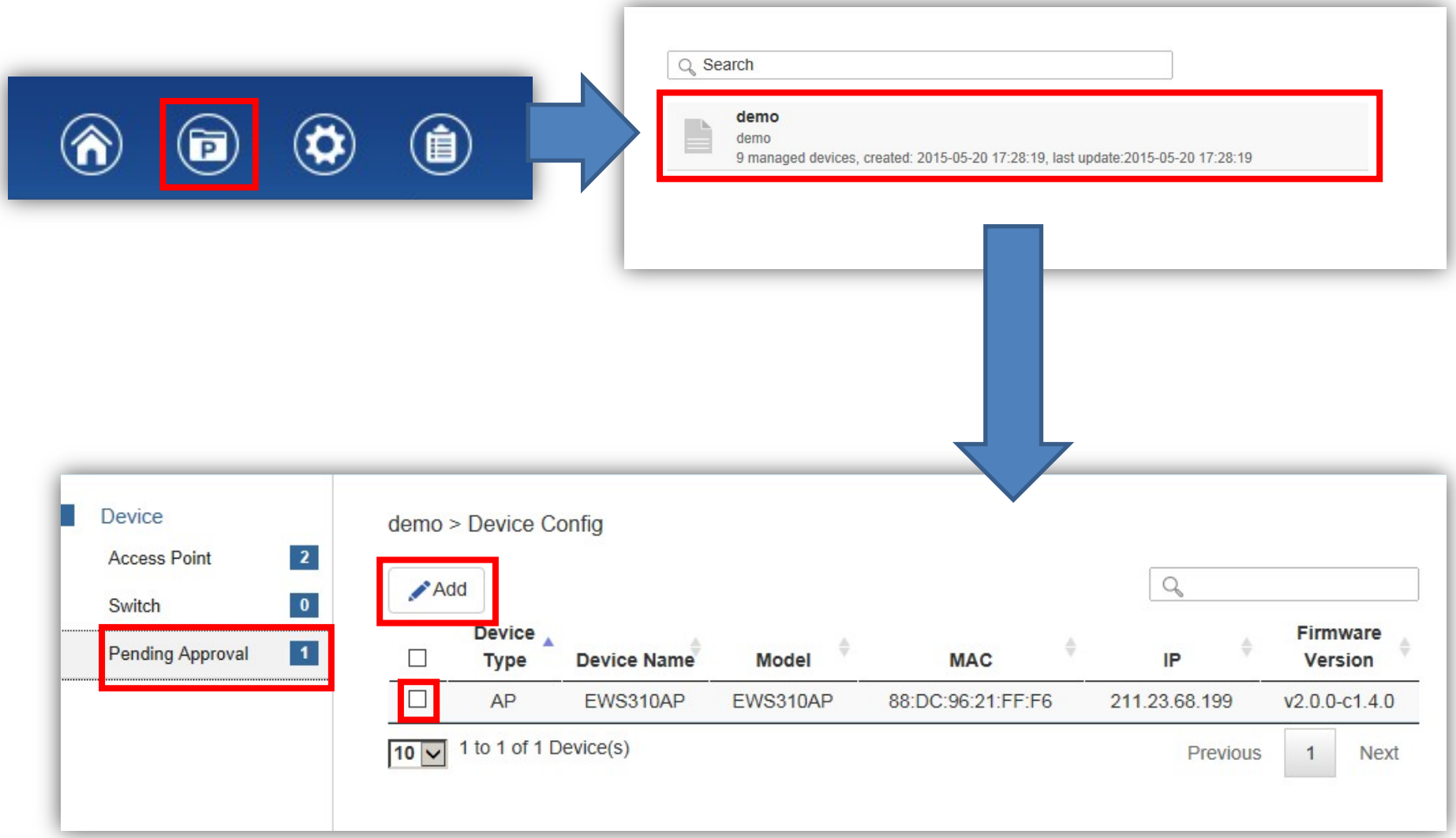


After registering with ezReg server, you can start adding AP into your inventory.



Enter MAC and check code

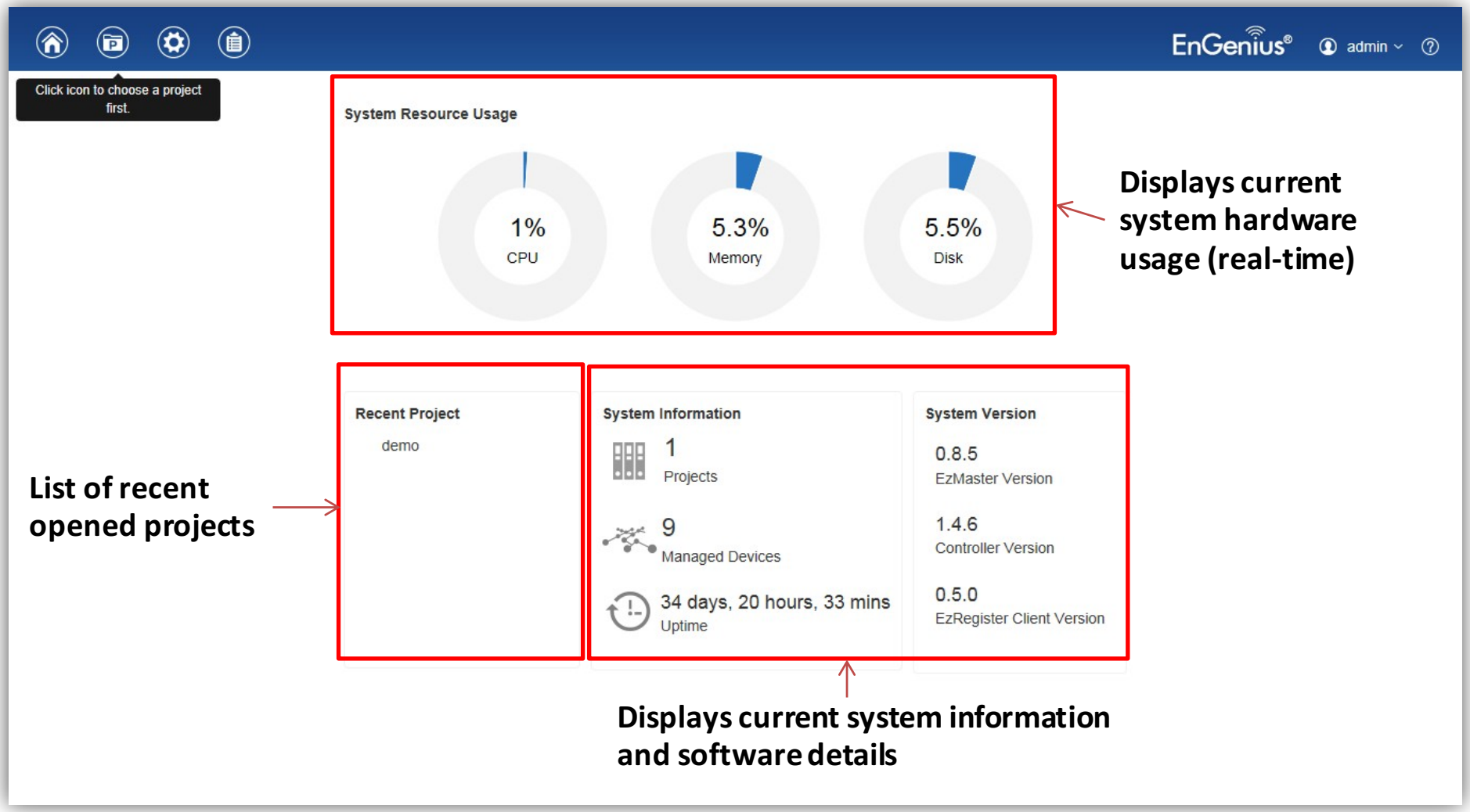
Adding AP to your Profile



Under to ‘Pending Approval’ list, select the AP(s) you with to manage and click ‘Add’

Main Dashboard (Home)

ezMaster



Home Button
Return to main dashboard

Projects
Create, delete or manage project. A ‘project’ is similar to a ‘profile’ which can be used to classify/represent different sites or floors of your deployment.

Settings
System settings including registering user account with ezMaster server

Inventory
- Register new devices with ezMaster
- Manage registered devices

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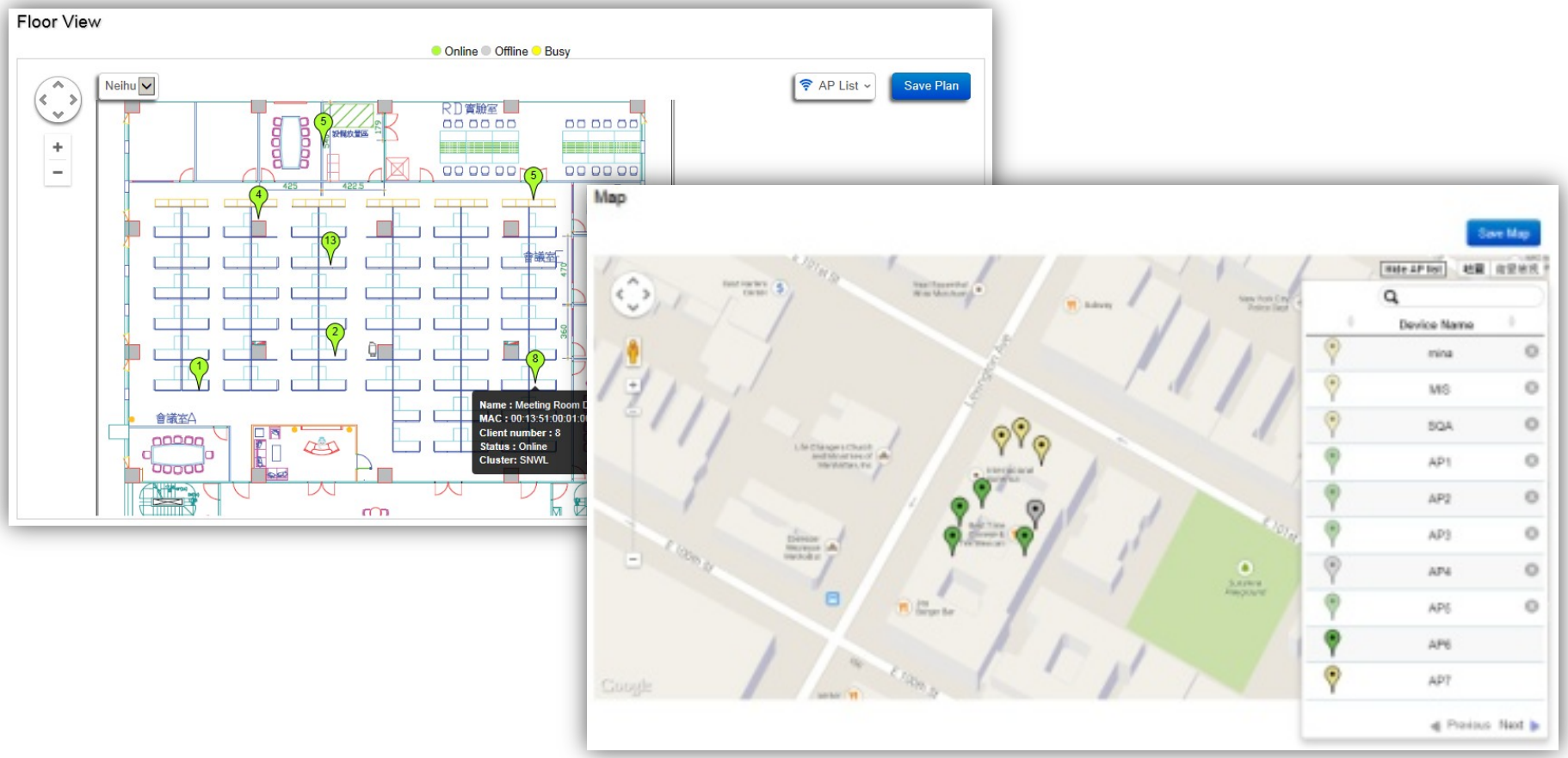
Google Map & Floor Plan View

Allows for quickly locating deployed APs, a useful feature for multi-site large scale AP deployments.



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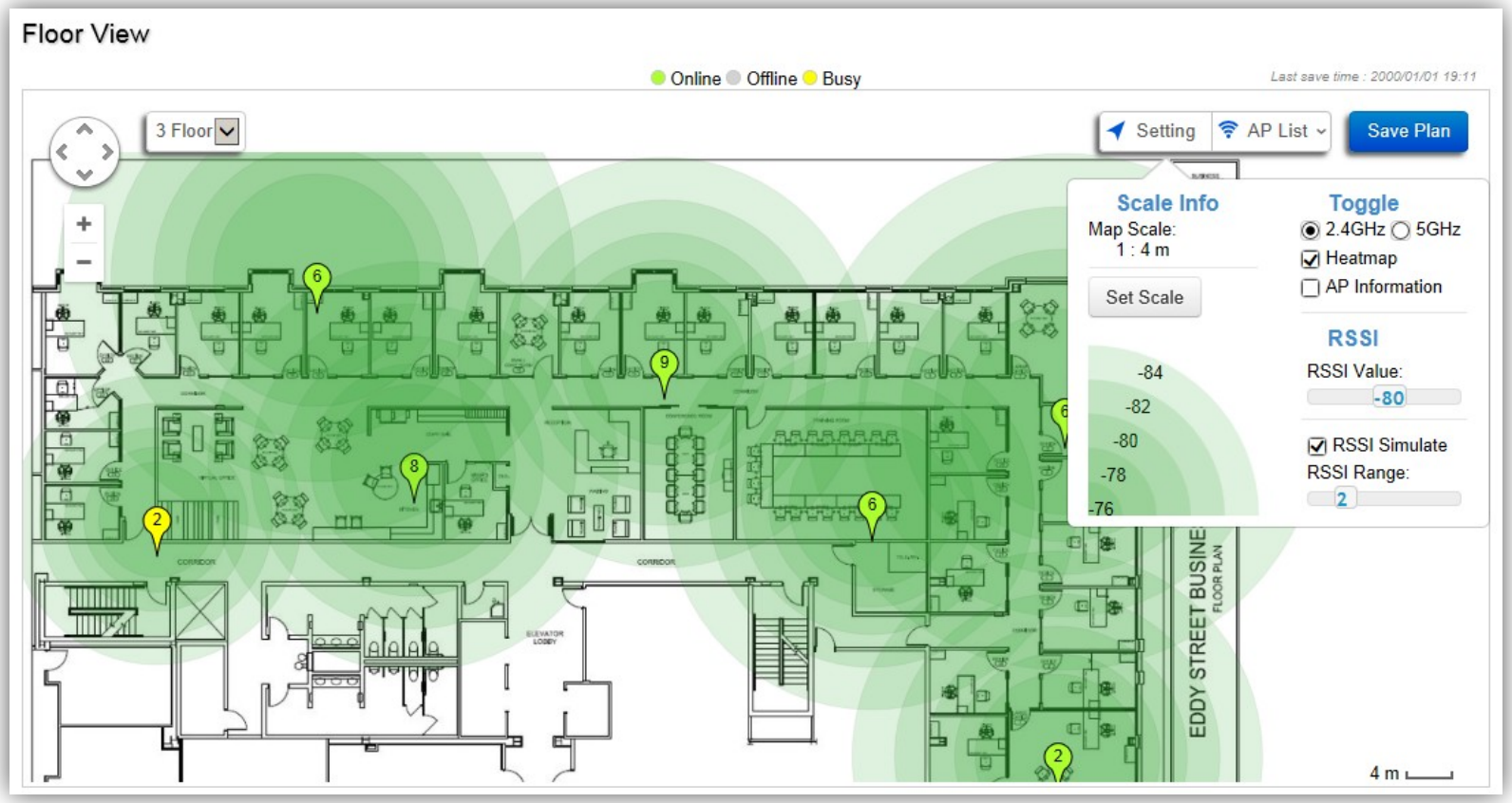
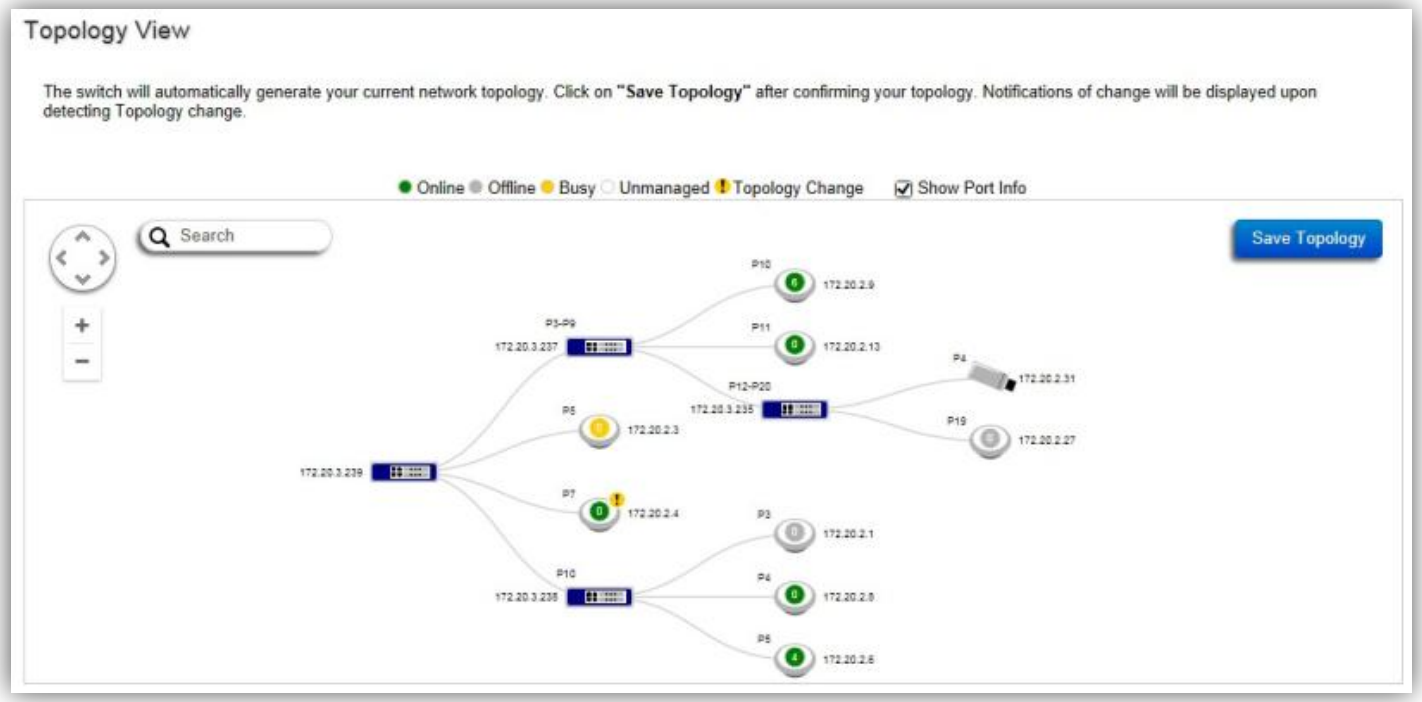
Wireless Coverage Display

Wireless coverage display can be toggled in Floor Plan to indicate the coverage range of each EWS Access Point so IT managers can easily and accurately plan and deploy wireless networks in any indoor environment.



Topology View

Automatically maps your network deployment and displays the device relationships across your network infrastructure. A innovative and useful feature for troubleshooting network issues that would otherwise require manual mapping, overlay monitoring software, or manually keeping track of MAC address tables.



Note: An EWS Switch is required in the network for the topology to generate. EGS L2 Series, EGS Smart v2 Series, EnGenius IP Cameras can be displayed in the topology.

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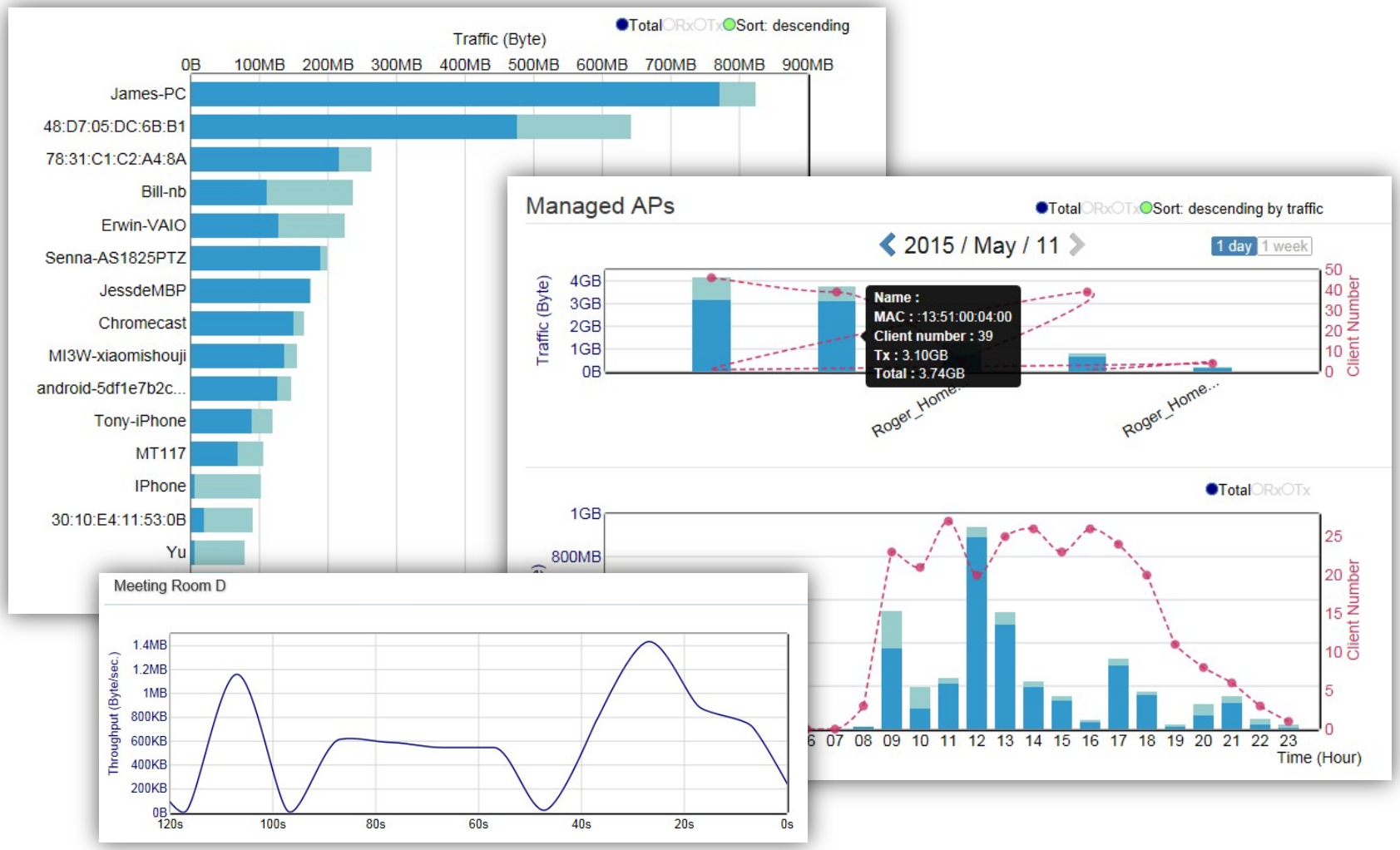
Graphical Statistics: Quick Overview on Network Usage

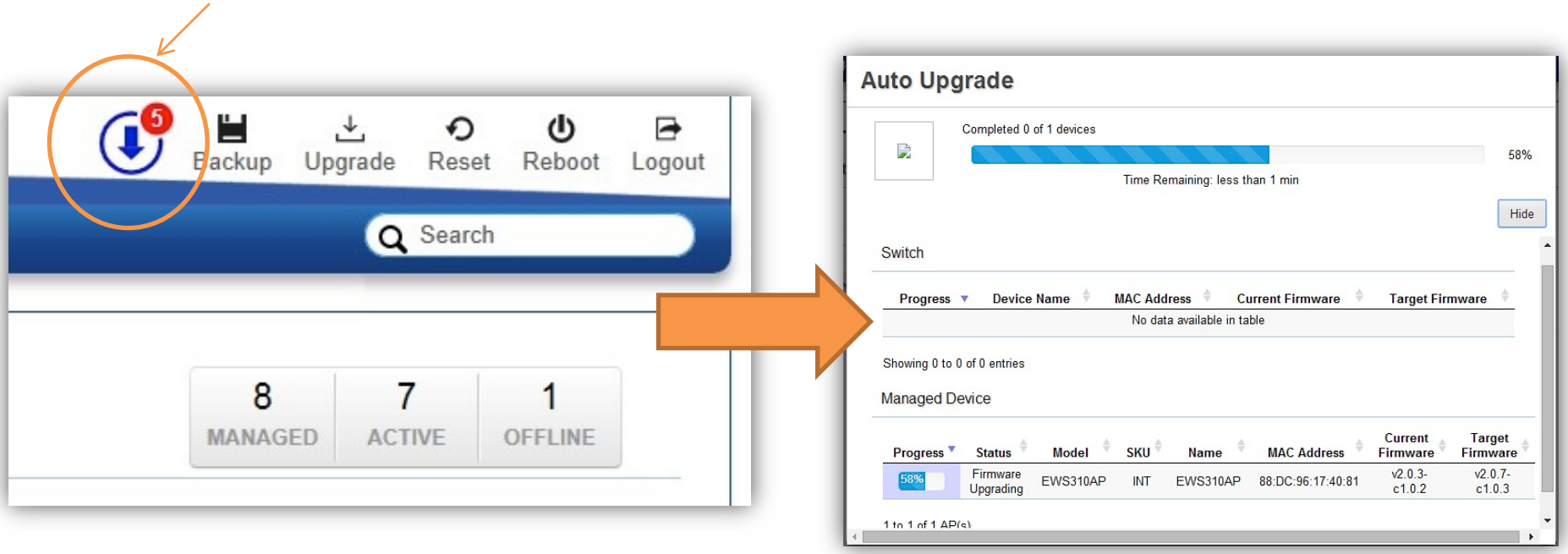


Automatically organizes and visualizes the network traffic in clear and easy-to-read graphs.

One-Click Update

Receive new firmware notifications in GUI so users can conveniently check that the current firmware on their APs is the most up-to-date version.

Notification will appear when new firmware is available.



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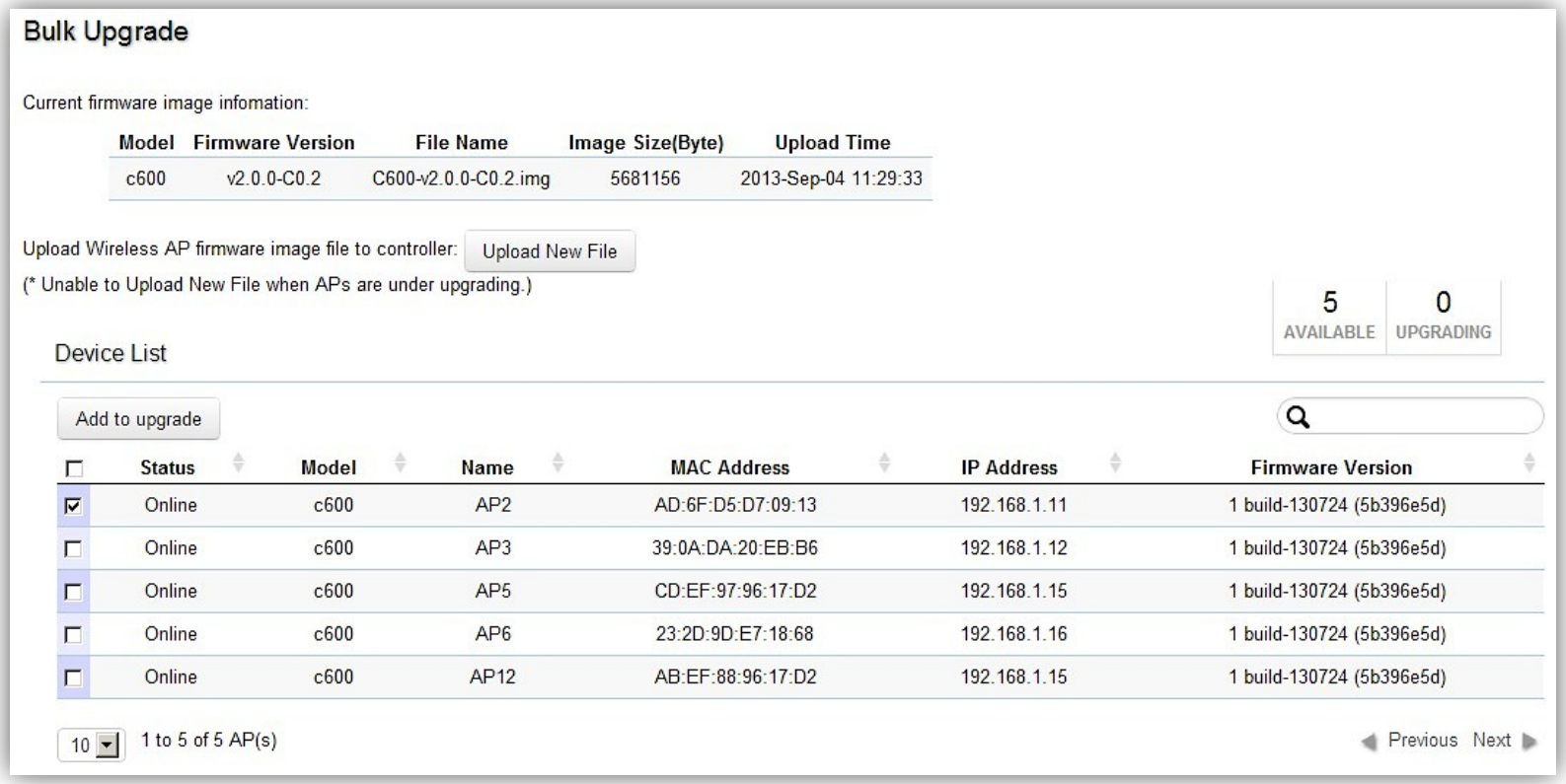
Bulk Firmware Upgrade

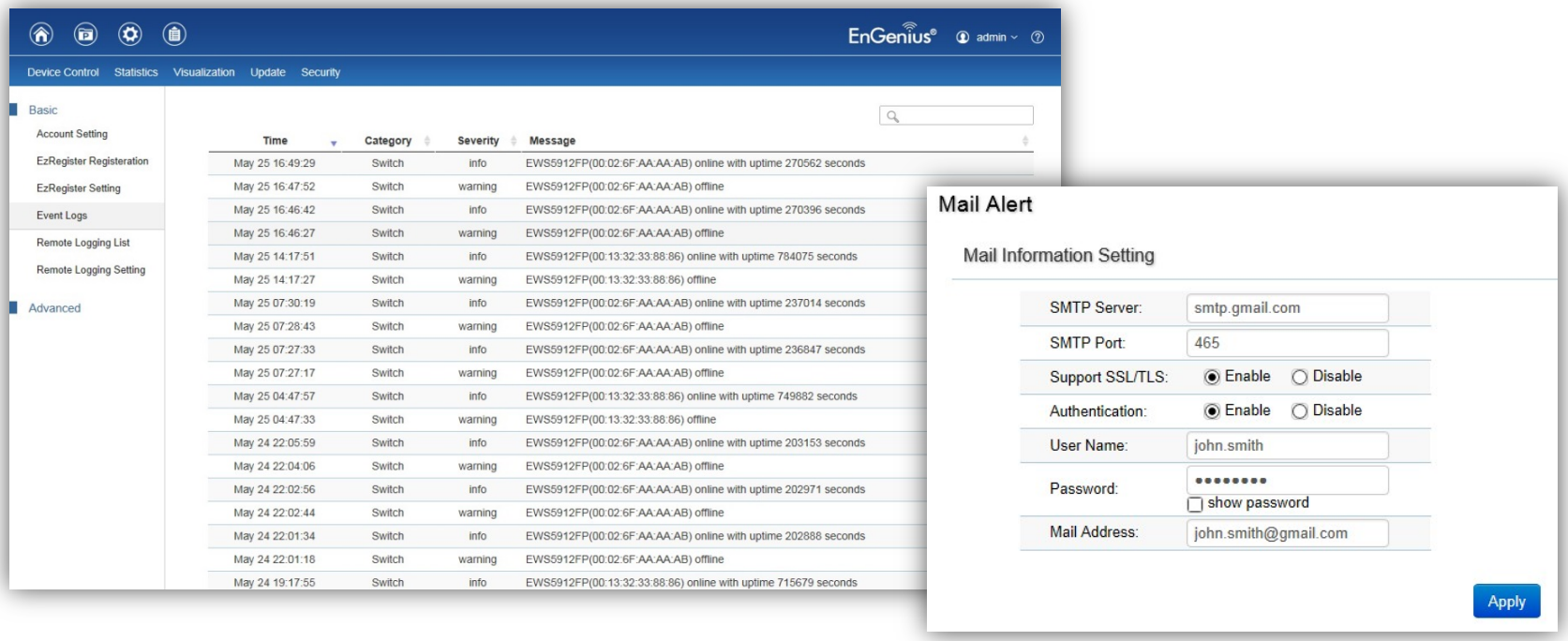
Upgrade firmware for managed APs: **Single** or **multiple units** to save time, and avoid repeating the process over and over again.



E-mail Alert

ezMaster's event log is designed to monitor the operation of both the system and the APs by recording the network event messages it generates during normal operation. These events may provide vital information about system activity that can help in the identification and solutions of system problems.

When an alarm event is detected, ezMaster will record it in the events log, and if configured, will send an email warning.

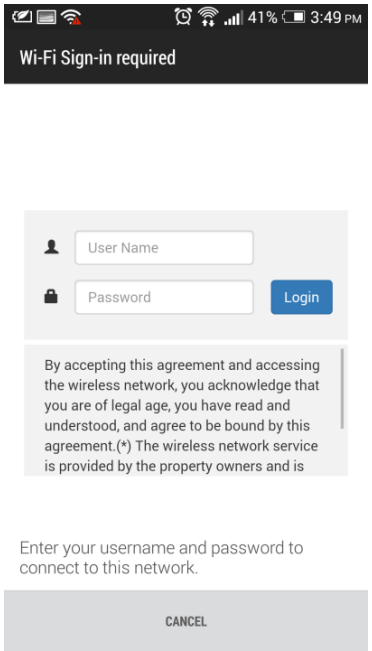


Captive Portal

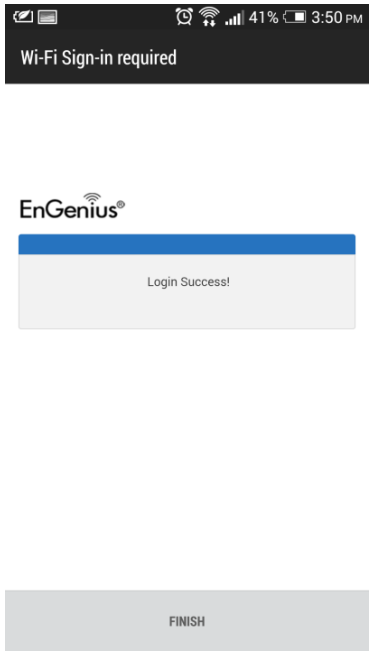
Supports:

1. Internal Authentication (Local Database) with Internal/External Login Page
2. External Authentication (RADIUS) with Internal/External Login Page
3. 3rd party cloud captive portal integration, i.e. Cloud4Wi

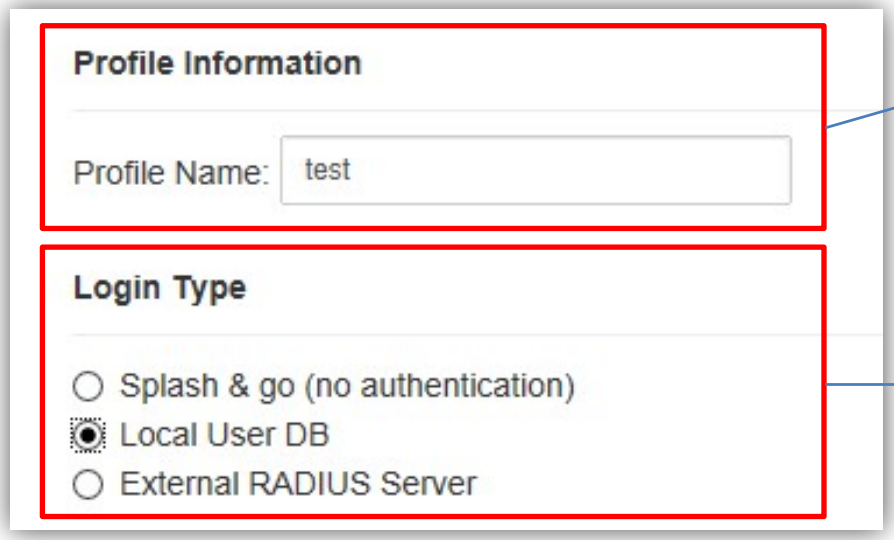
After SSID authentication



Splash page login



Login successful

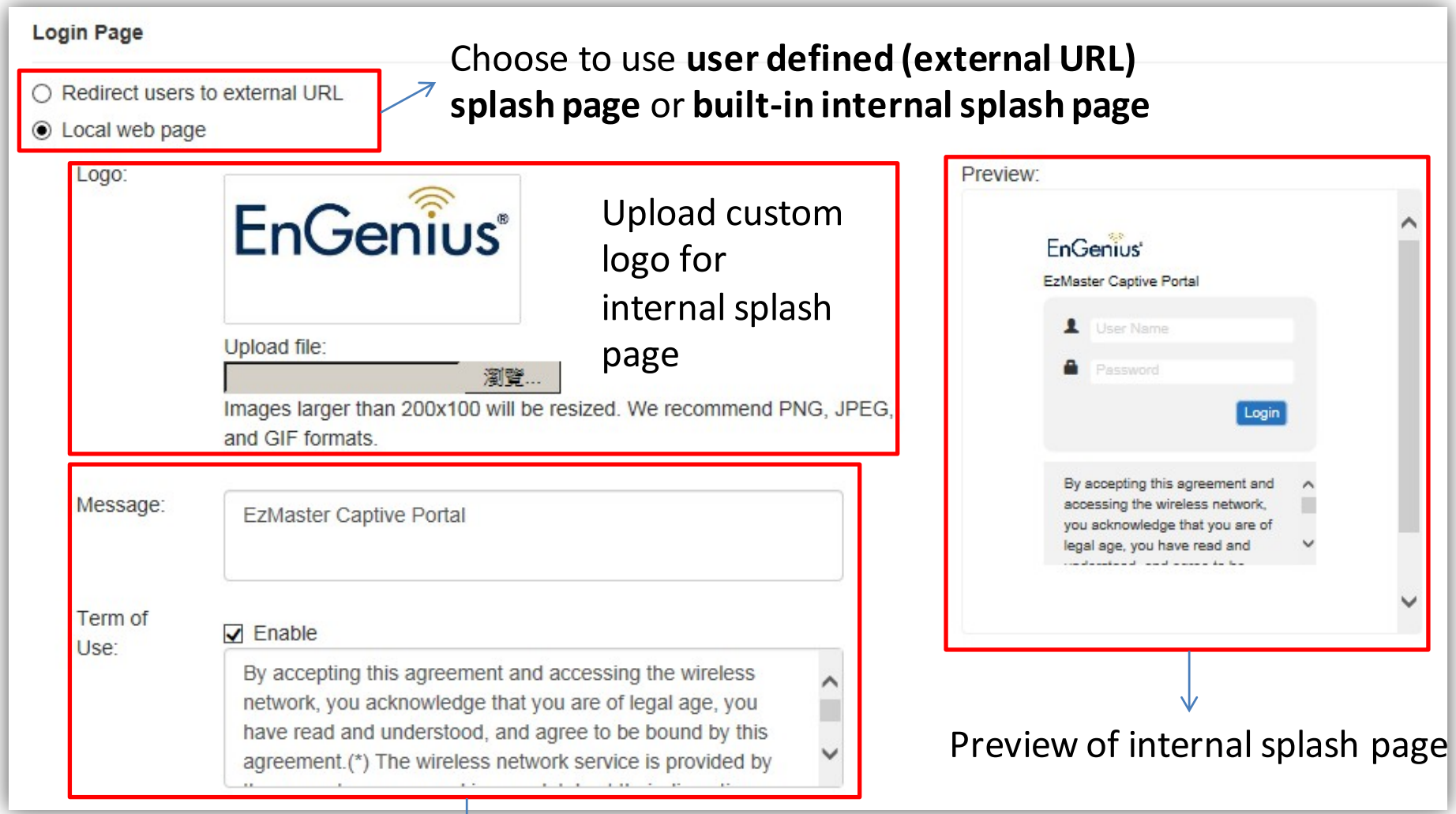


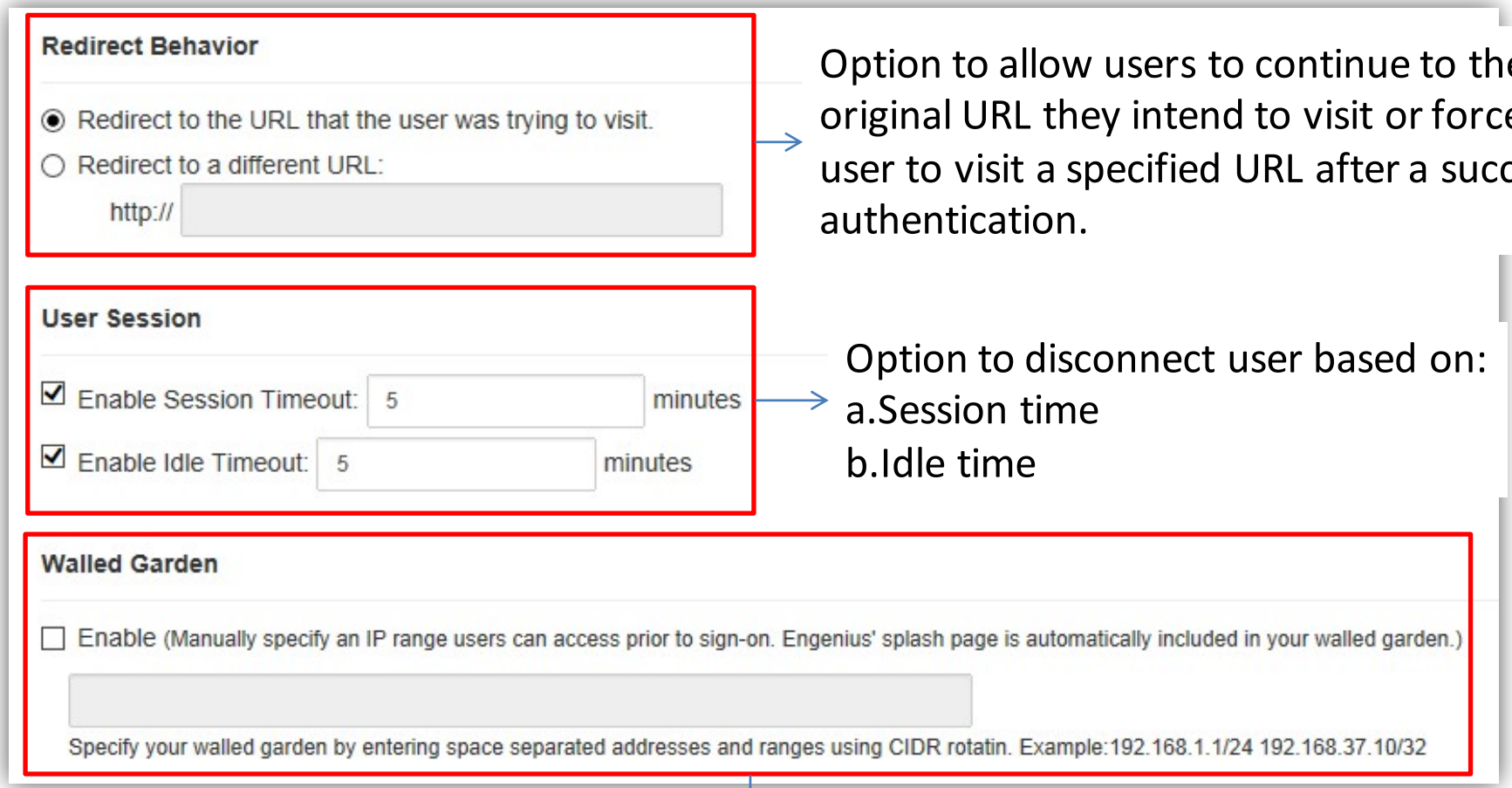
Create different captive portal profiles and apply directly to SSID

Splash & Go: No authentication required. Users can access the network as soon as they associate.

Local User DB: Authenticate users using local user database. Users must enter a username and password before being allowed on the network.

External RADIUS Server: Authenticate users using an external RADIUS server. Users must enter a username and password before being allowed on the network.


Login Page
Redirect users to external URL
Local web page
Choose to use **user defined (external URL) splash page** or **built-in internal splash page**
Logo:
EnGenius®
Upload file:
瀏覽...
Images larger than 200x100 will be resized. We recommend PNG, JPEG, and GIF formats.
Upload custom logo for internal splash page
Message:
EzMaster Captive Portal
Term of Use:
Enable
By accepting this agreement and accessing the wireless network, you acknowledge that you are of legal age, you have read and understood, and agree to be bound by this agreement.(*) The wireless network service is provided by
Preview:
EnGenius
EzMaster Captive Portal
User Name
Password
Login
By accepting this agreement and accessing the wireless network, you acknowledge that you are of legal age, you have read and
Preview of internal splash page
Enter custom message or terms of use if desired



Option to allow users to continue to the original URL they intend to visit or force the user to visit a specified URL after a successful authentication.

Option to disconnect user based on:
a.Session time
b.Idle time

Manually specify an IP range users can access prior to sign-on. When you are operating the hotspot in a hotel, for example, you can include the hotel's Web site in the walled garden. A walled garden for a corporate office, on the other hand, can include Web pages that show the office directory, emergency information or building maps.

Fast Roaming

Fast roaming uses protocols defined in 802.11r to allow continuous connectivity for wireless devices in motion, with fast and secure roaming from one AP to another. Coupled with 802.11k, wireless devices are able to quickly identify nearby APs that are available for roaming and once the signal strength of the current AP weakens and your device needs to roam to a new AP, it will already know which AP is the best to connect with.

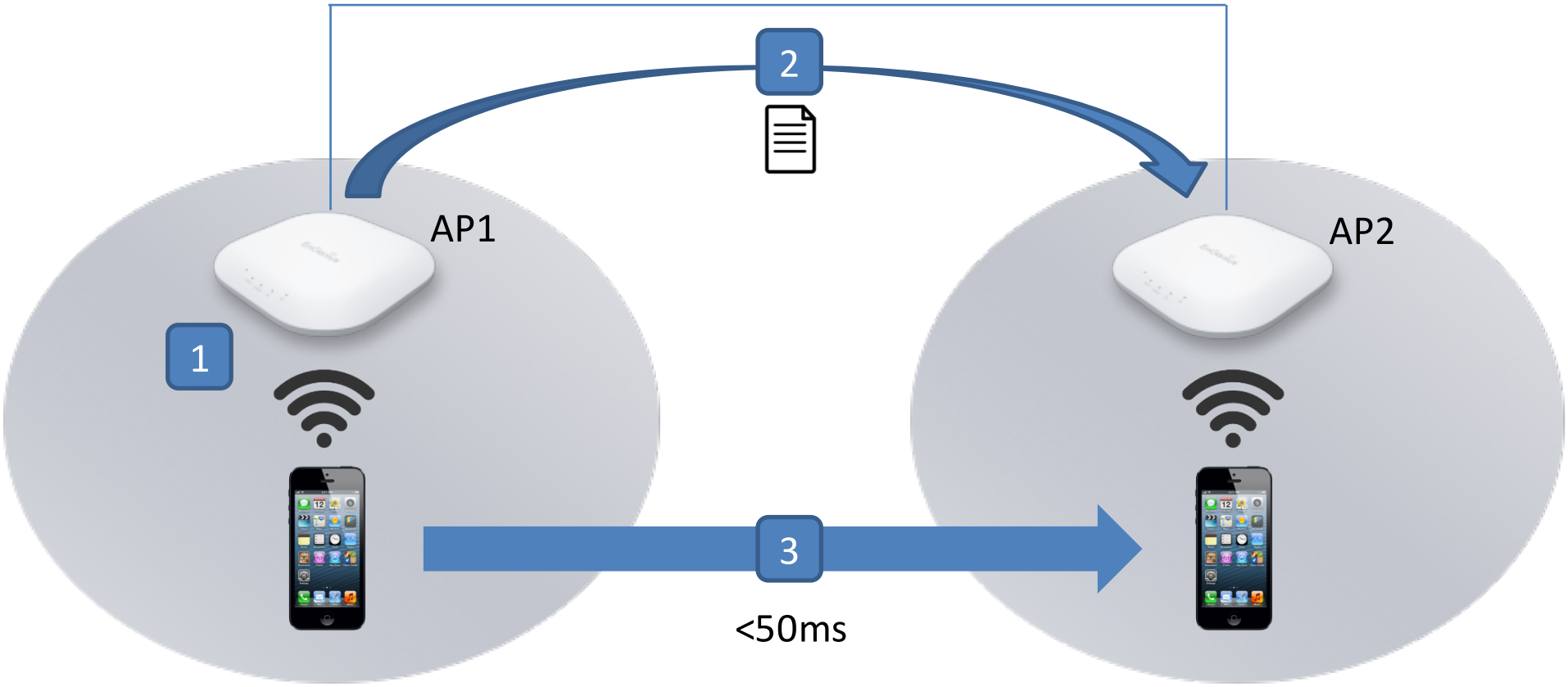
Note that not every wireless client supports 802.11k and 802.11r. Both the SSID and security options must be the same for this fast roaming to work.

Fast Roaming is available when using the security methods listed below:

- RADIUS Authentication Required:
WPA2-Enterprise, WPA-Mixed Enterprise

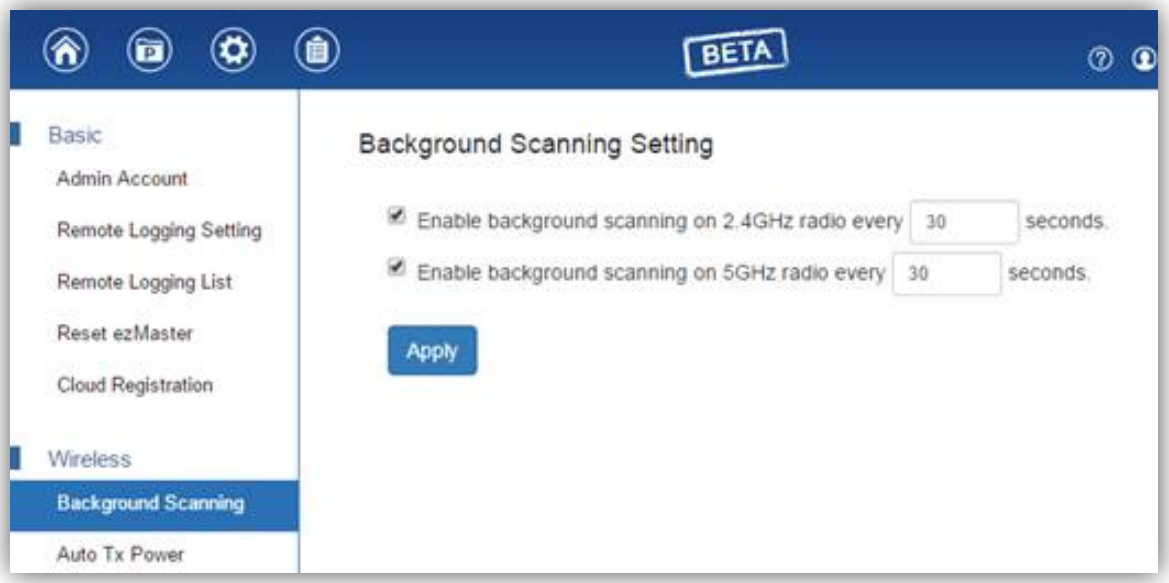
- No RADIUS Authentication Required:
WPA2-PSK, WPA-Mixed

Fast Roaming



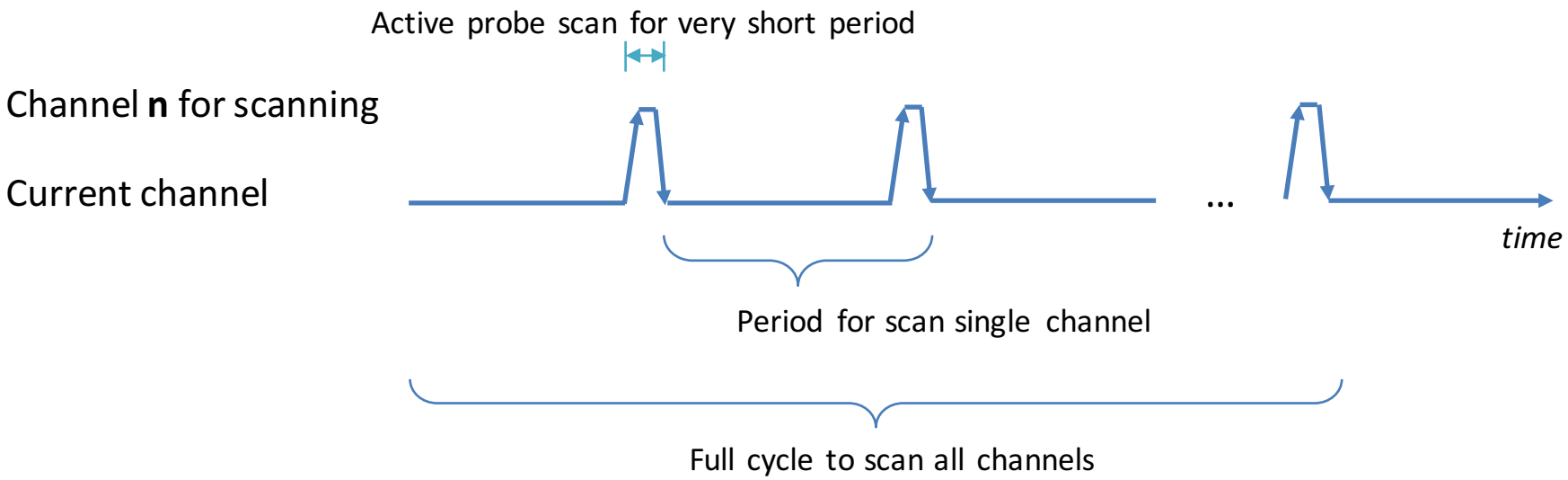
1. Client logs on AP1
2. The access key of the client is passed on to all connected APs in the network
3. When the client moves between AP1 to AP2, the roaming procedure takes place.

Background Scanning Explained (1/2)

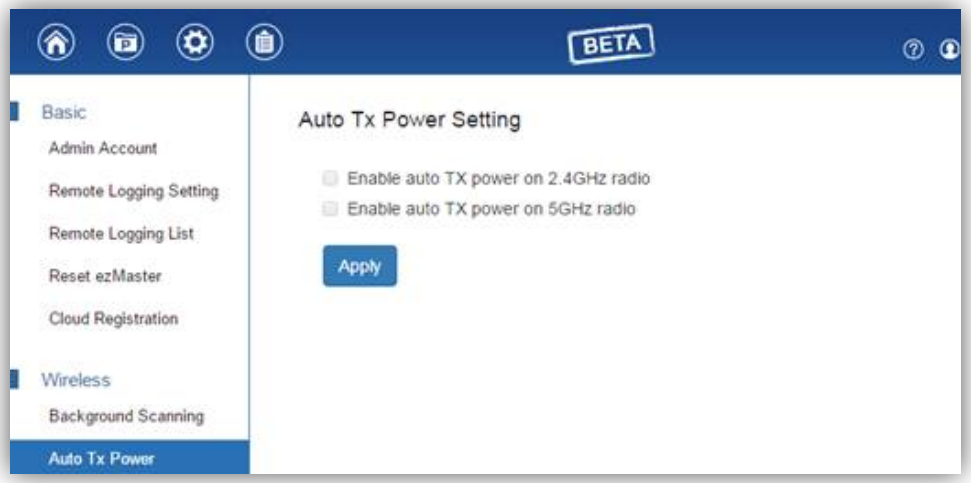


- AP periodically executes channel hopping to obtain channel utilization statistics and detects surrounding devices, including neighboring APs and rogue devices in all available channels.
- Scans one channel at a time, minimize throughput impact.
- Background scanning is the basis of Auto Channel, Auto Tx Power and Rogue AP detection, and must be enabled for these features to operate.
- For latency-sensitive applications such as VoIP, it is recommended to set the background scan interval to a higher value, e.g. 5 or 10 minutes.
- For regular application, the recommended value is 30 seconds. This value will also be directly related on how long it takes for the AP to scan for rogue devices.

Background Scanning Explained (2/2)

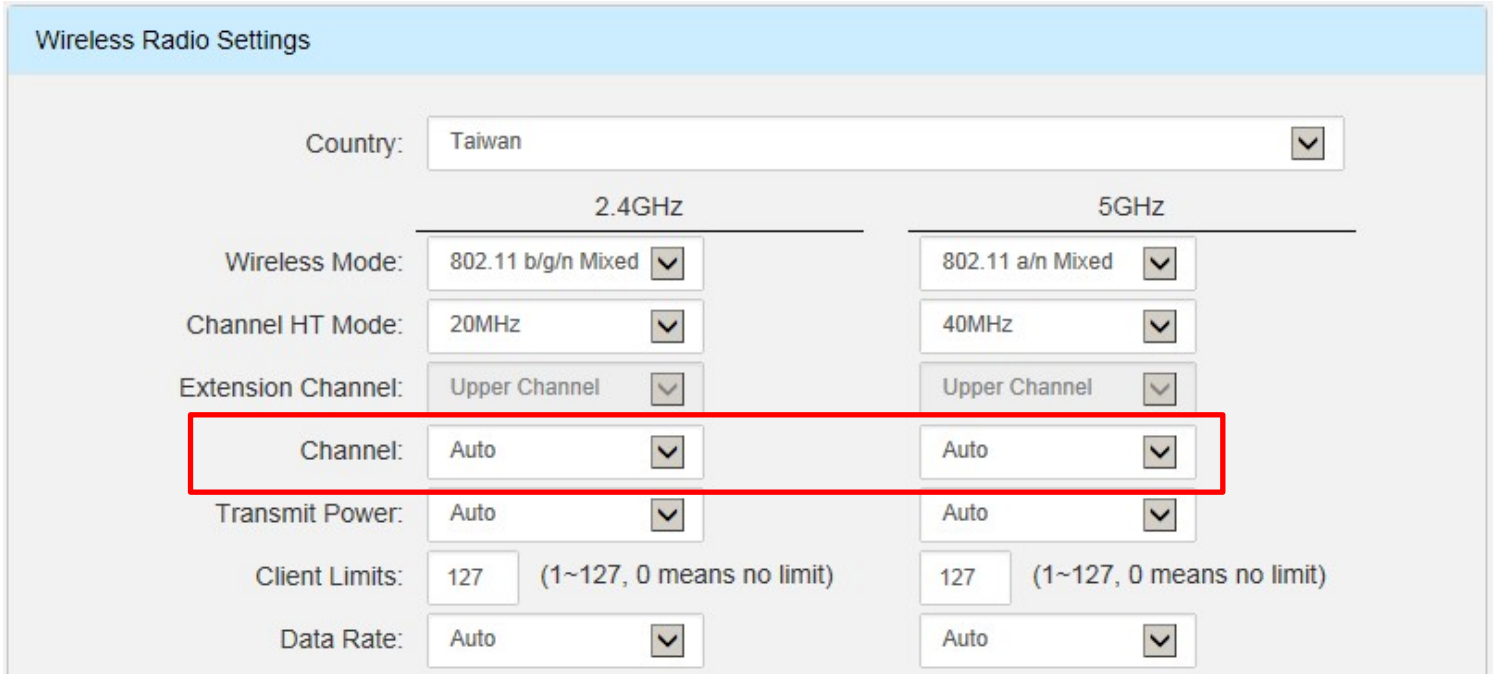


Auto Tx Power



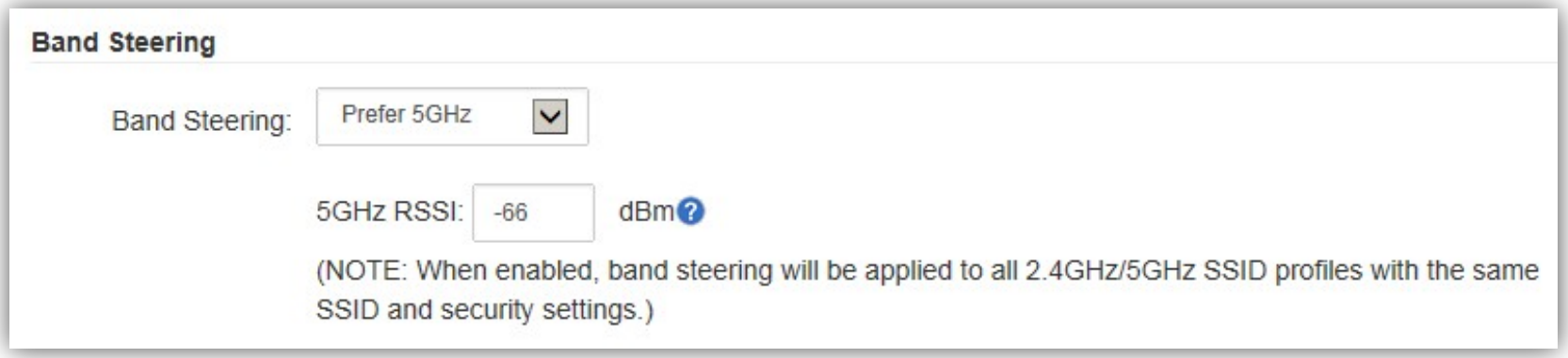
- Using the information collected by Background Scanning, APs can automatically adjust their transmit power to optimize coverage.
- When enabled, APs will optimize their transmit power based on the time interval configured for Background Scanning.
- Background Scanning must be enable for this feature to operate.
- This feature is designed to operate when all the following conditions below are met:
  1. Transmit Power of the AP is set to Auto.
  2. The APs are managed by the same ezMaster.
  3a. The AP will reduce its transmit power by half when the AP detects that the RSSI of a co-channel APs is stronger than -50dBm meaning that they are very close to each other.
  3b. The AP will recover its transmit power to 100% when the AP detects that the RSSI of co-channel APs is lower than -85dBm or no longer exist.
- EnGenius does NOT recommend enabling this feature as it may lead to a non-optimized wireless network.

Auto Channel Selection



- Using the information collected by Background Scanning, ezMaster has the channel utilization statistics of all channels. With this info, APs can automatically adjust their radio channel for the best channel utilization and performance.
- Background Scanning must be enable for this feature to operate.
- Auto Channel Selection will take place on an AP when the Channel of the AP is set to Auto (under Wireless Radio Settings).

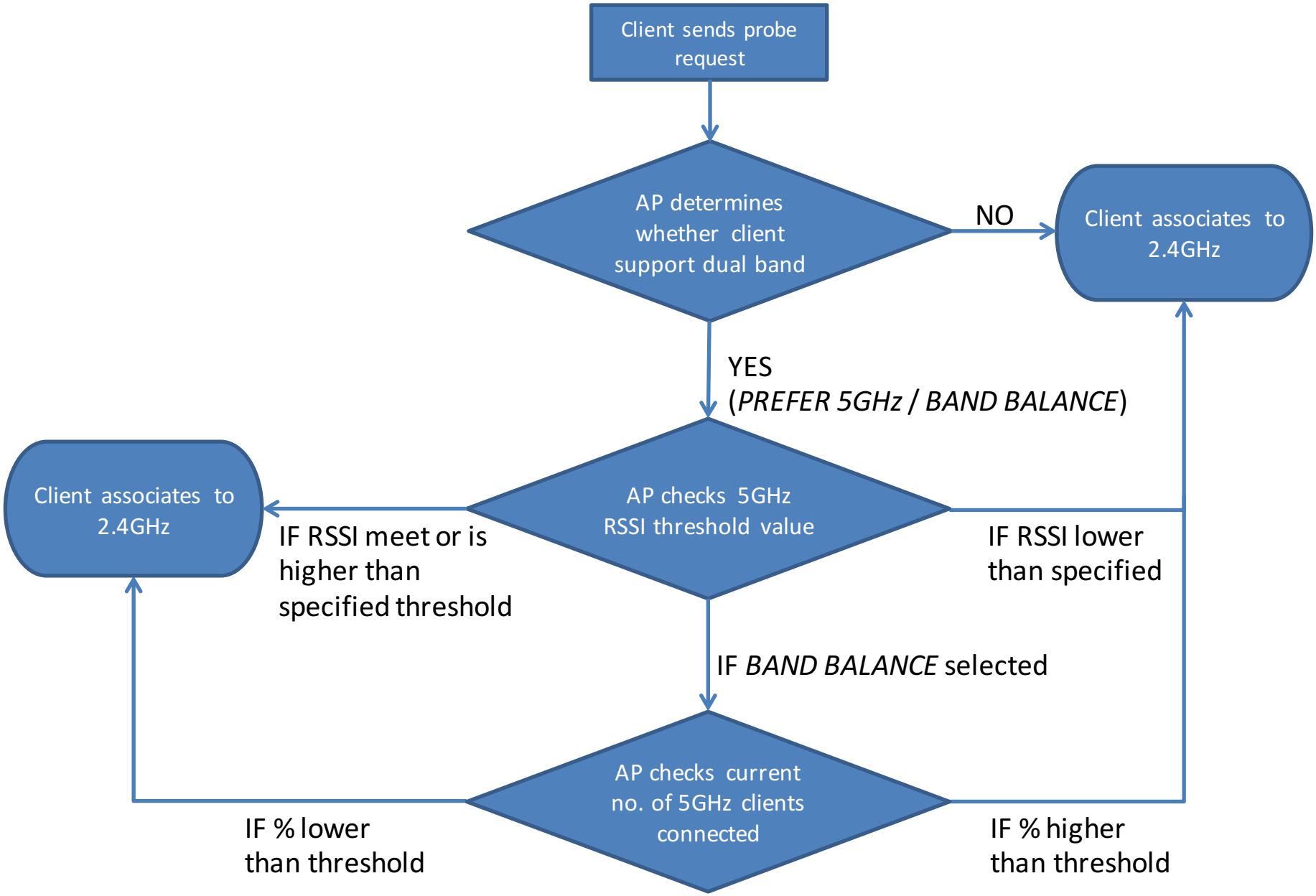
New Band Steering Algorithm (1/2)



Prefer 5GHz: Specify the minimum received signal strength indicator (RSSI) required for dual-band wireless clients to associate to the 5GHz band. If the client's RSSI value drops below this threshold, it will only be able to connect to the 2.4GHz band.

Band Balance: Automatically balances the number of newly connected clients across both 2.4GHz and 5GHz bands. For example, the value 75 indicates that the AP will place 75% of all newly connected clients whose RSSI is above threshold onto the 5GHz band while the remaining 25% of the newly connected clients will be left on the 2.4GHz band.

New Band Steering Algorithm (2/2)



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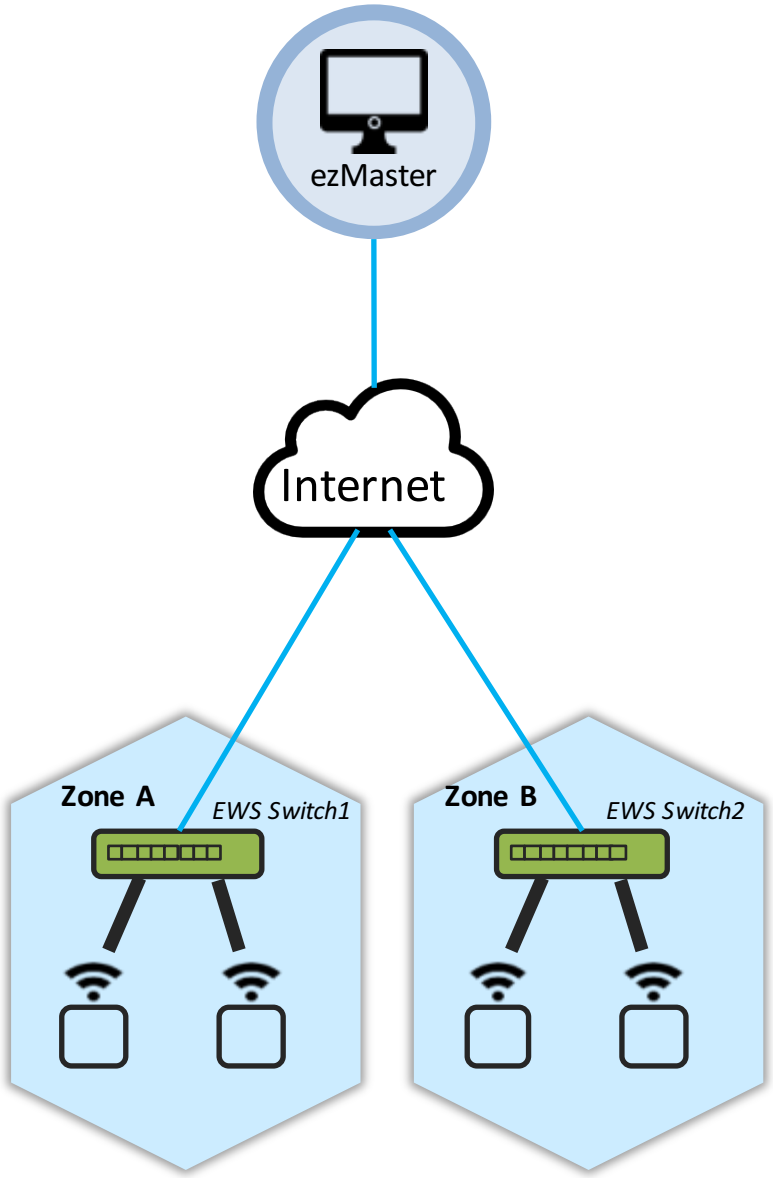
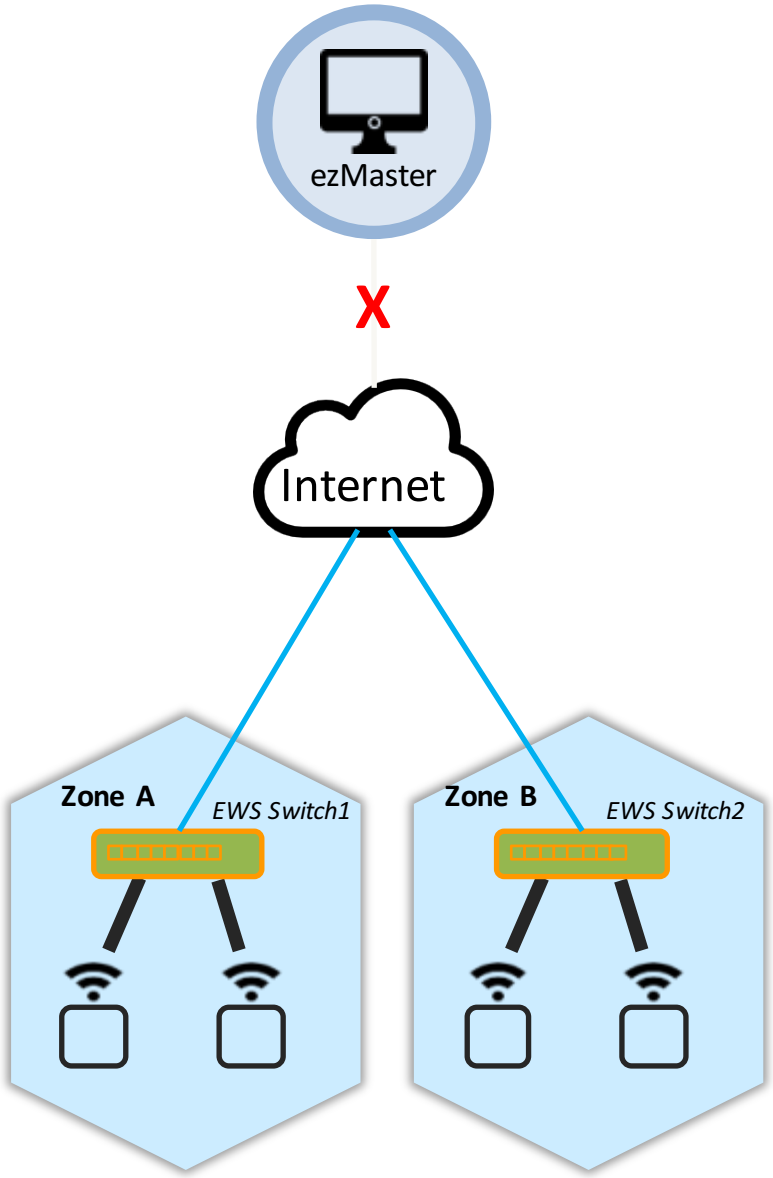
APPENDIX B: FUTURE FEATURES

SmartSync Redundancy 1/3

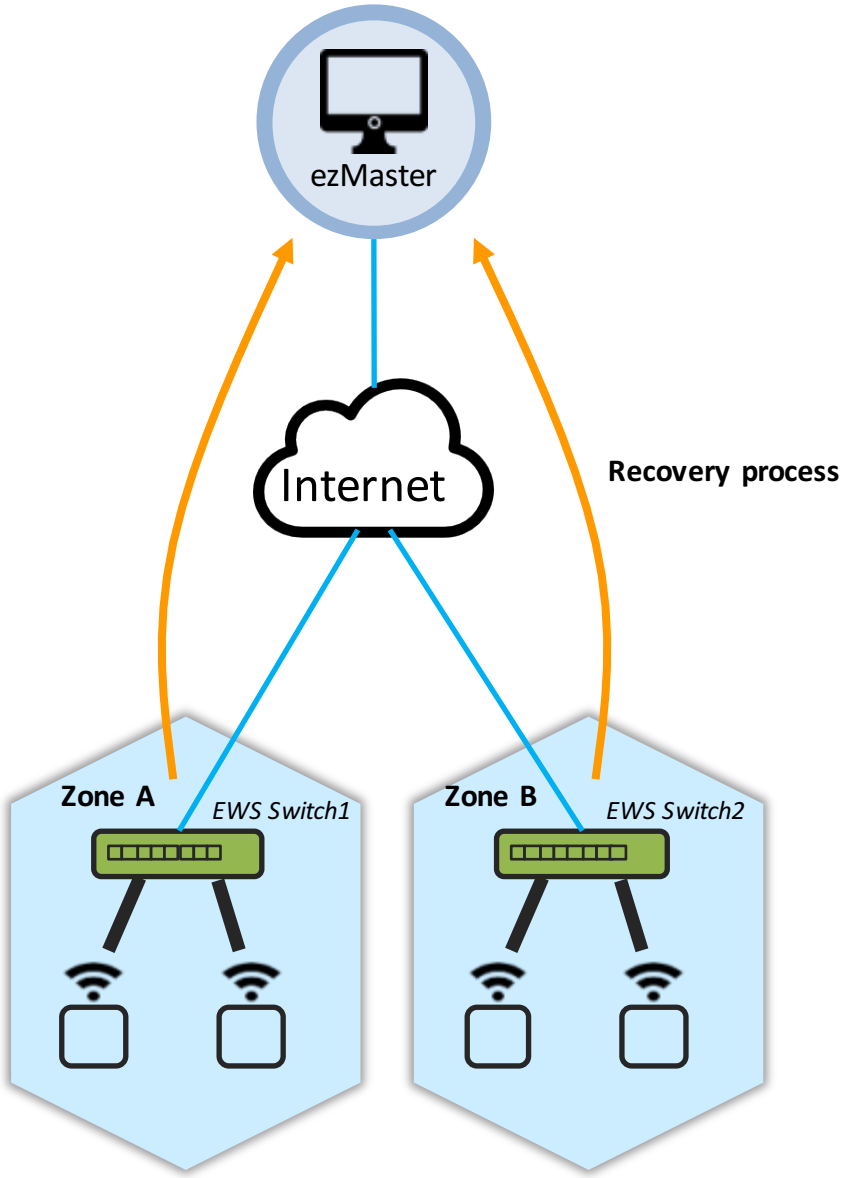


- Normally, all Switches and APs are managed centrally by ezMaster.
- Enable SmartSync feature in EWS Switch makes ezMaster be able to sync necessary data to the device.

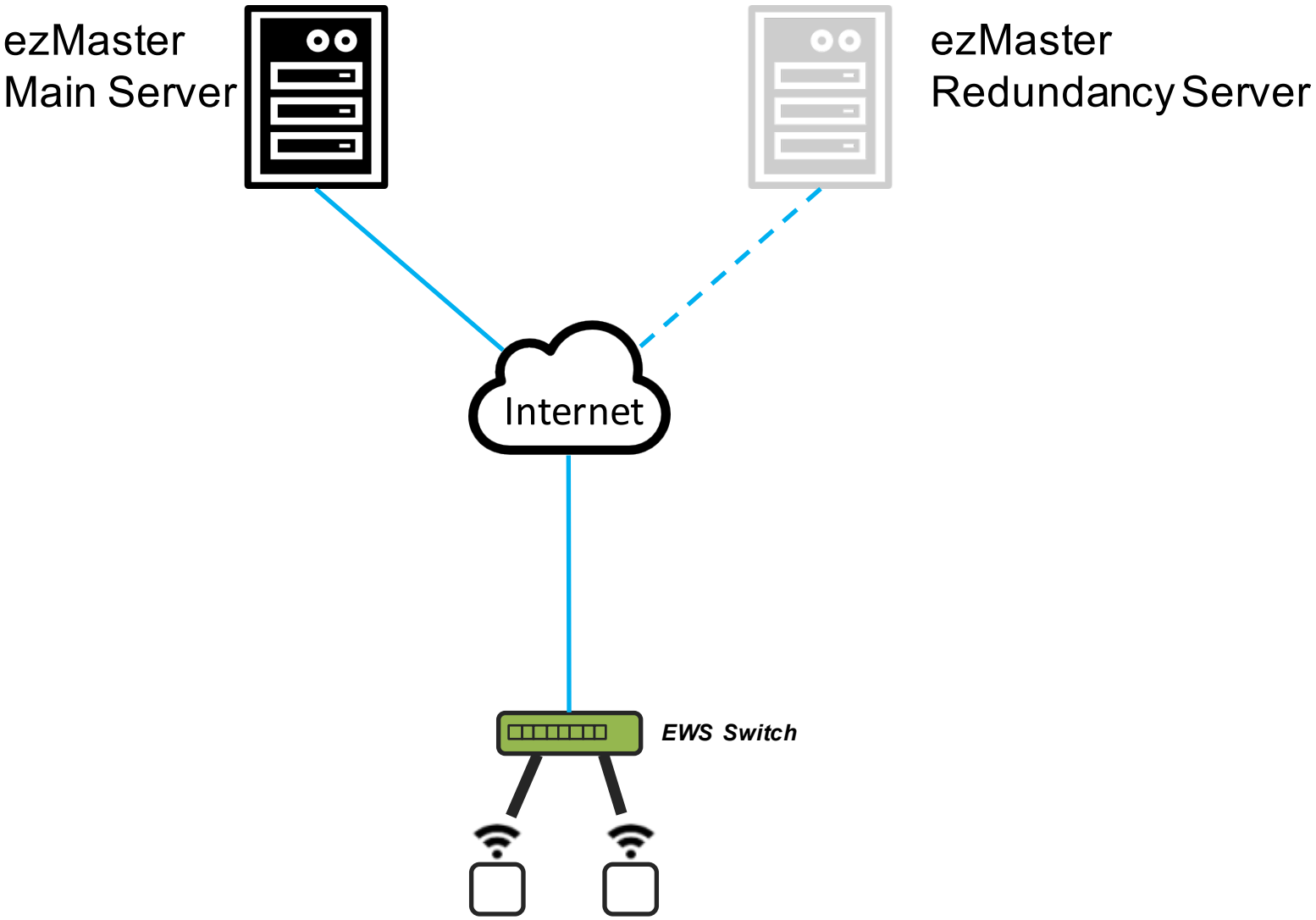


- If ezMaster disconnects from the network, EWS Switches automatically activate the redundancy feature and manage APs in the same zone.
- All APs are still functioning normally.
- User can still monitor APs with EWS's GUI (statistics, AP status, clients …etc.)

SmartSync Redundancy 3/3



- When ezMaster is back online, EWS Switch will release its management on downstream to APs.
- Logs & statistic data will then synchronize back to ezMaster automatically.


ezMaster
Main Server
ezMaster
Redundancy Server
Internet
EWS Switch

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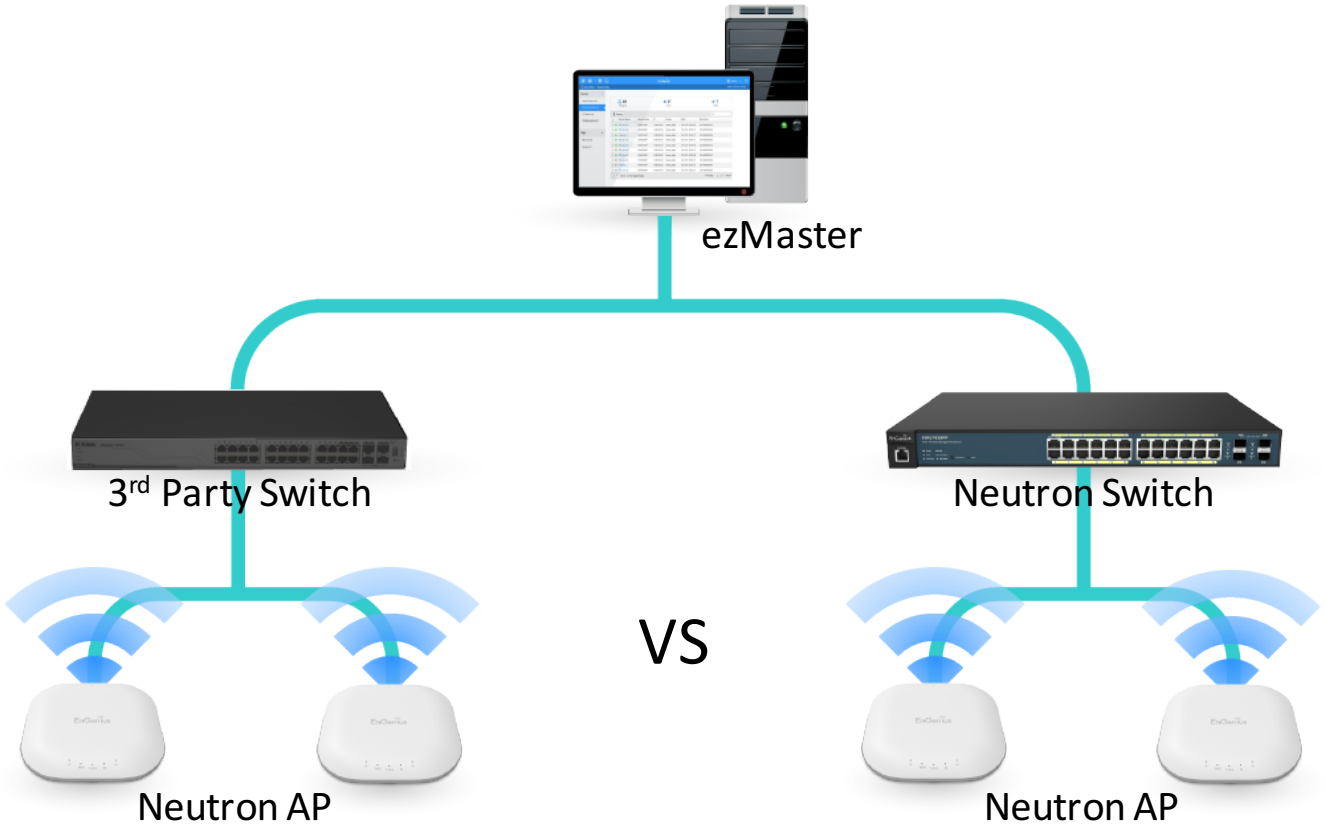
APPENDIX C: MISC

Advantages of a Complete EnGenius Network

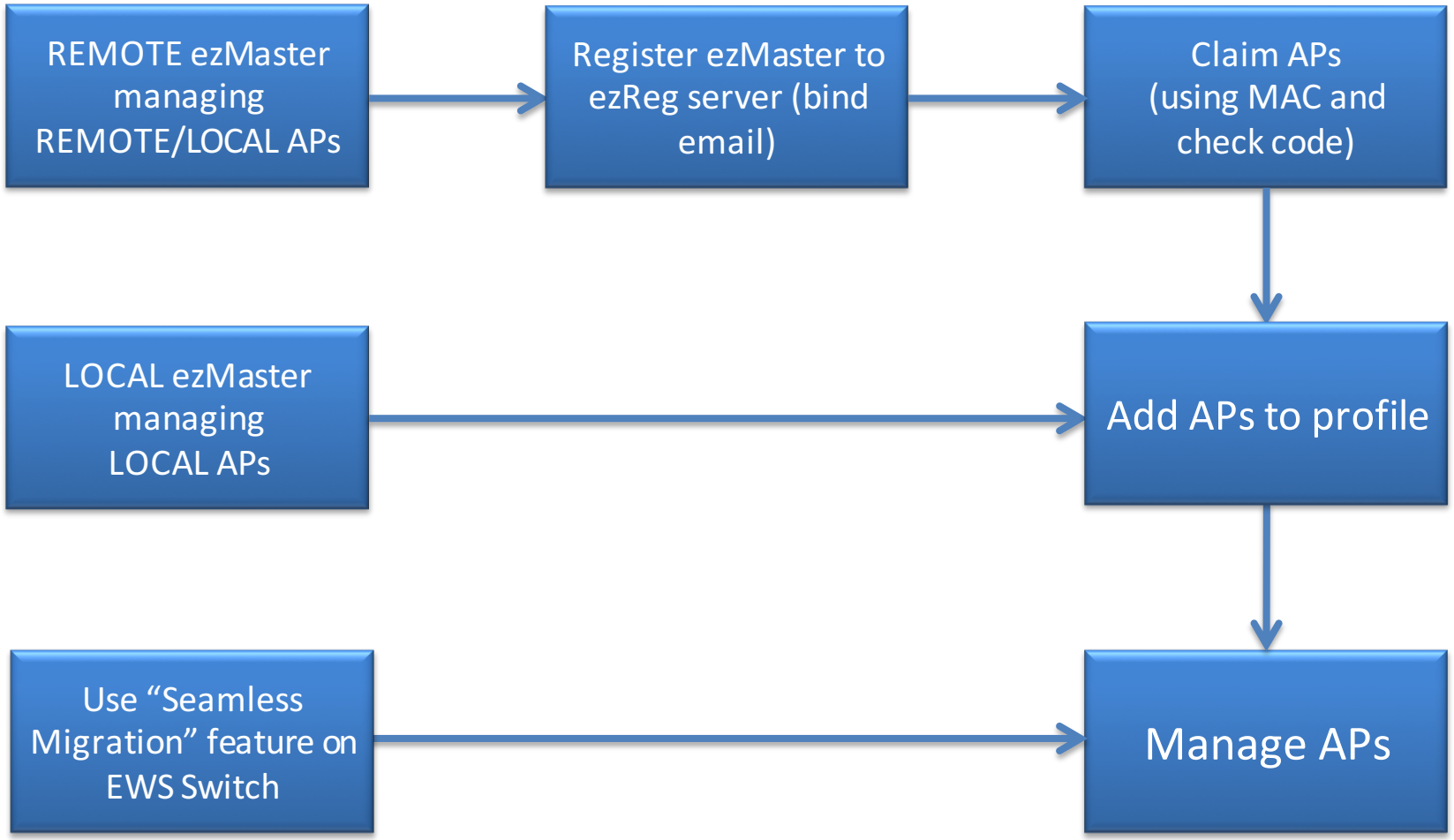


- AP config/settings
- AP status monitoring

- SmartSync Redundancy* (50 APs/switch)
- Complete Topology View
- PoE Port On/Off Control
- Seamless Migrate existing EWS network

**Available through future software upgrade.*

Flow Chart: Managing Access Points



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Software Feature	ezMaster	EWS Switch
Project Based Management	v	-
Cross-Network AP Management	v	-
AP Group Configuration	v	v
Auto Channel Selection	v	v
Auto Tx Power	v	v
Background Scanning	v	v
Traffic Shaping	v	v
Fast Roaming	v	v
Band Steering	v	v
RSSI Threshold	v	v
Floor Plan with Wireless Coverage View	v	v
Map View	v	v
Rogue AP Detection	v	v
Visual Topology View	v	v
Wireless Client Fingerprinting	v	v
Wireless Traffic & Usage Statistics	v	v
Bulk Firmware Upgrade	v	v
One-Click Update	v	v
Captive Portal	v	v
Email Alert	v	v
Intelligent Troubleshooting	-	v
Schedule Tasks (WiFi/PoE Scheduling)	-	v

*As of c1.6.x release