

# Ruckus Wireless Base Training

ZoneDirector , Unleashed

Calman.chang

[calman.chang@jlead.com.tw](mailto:calman.chang@jlead.com.tw)

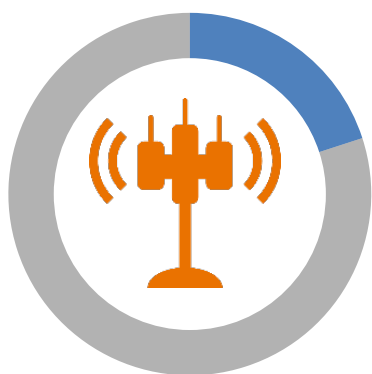




# 議程

- 無線網路趨勢
- Ruckus 無線技術 & 產品
- ZoneFlex
- Unleashed
- ZoneDirector
- Lab1
- Lab2

# 2021 全球流量預估統計



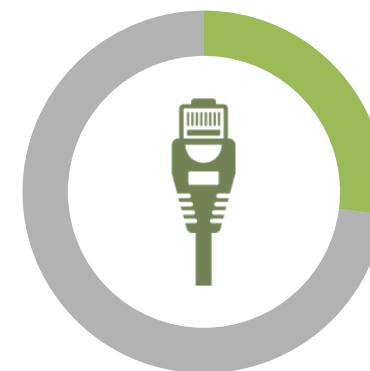
**20%**

行動通信



**53%**

無線網路



**27%**

有線網路

問題來了：您準備好了嗎？

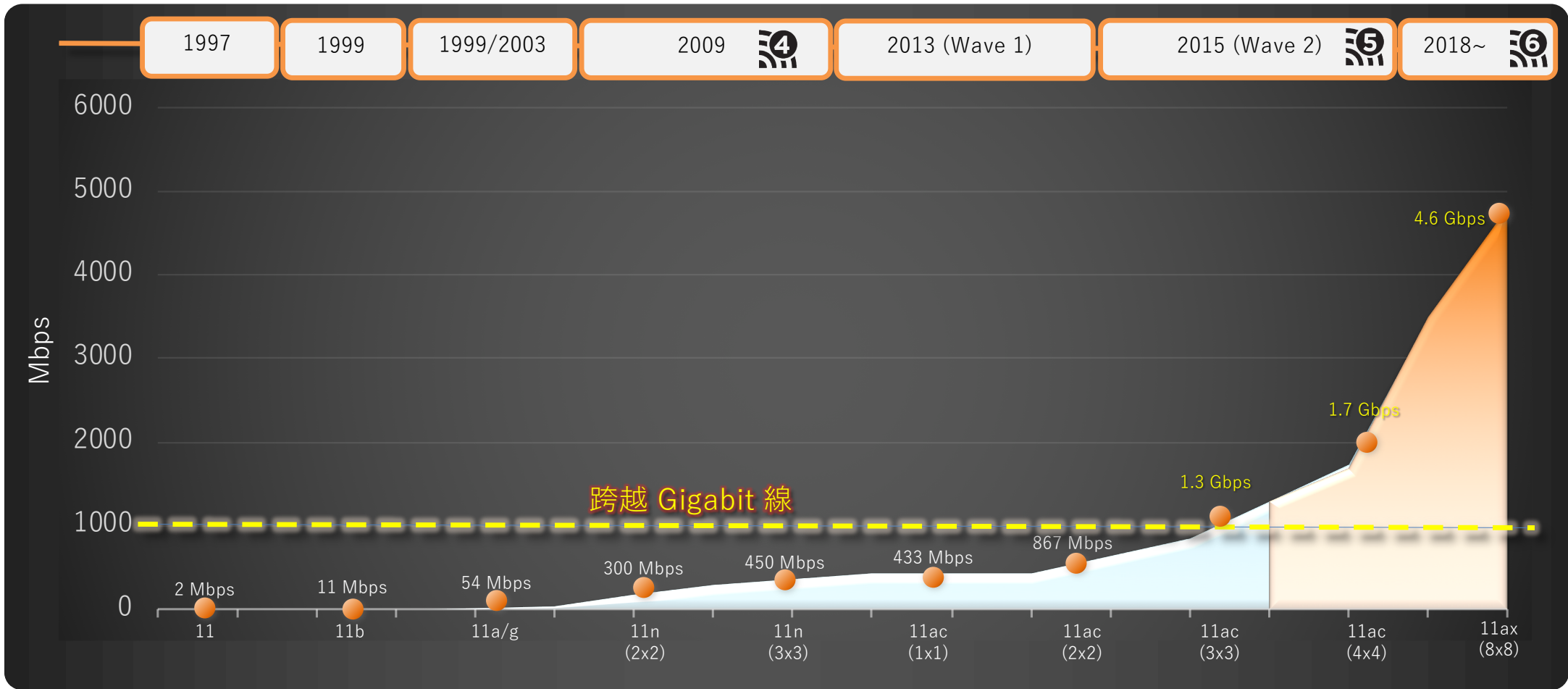
- 超過 1000 倍以上的頻寬用量
- 超過 200億個物聯網設備(IoT)
- 超過 50% 的設備與設備間互聯

資料來源: *Global Internet Traffic (2021)*



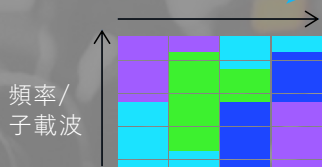
Ruckus 為您帶來全新無線體驗

# 越來越快的 WiFi 傳輸速度



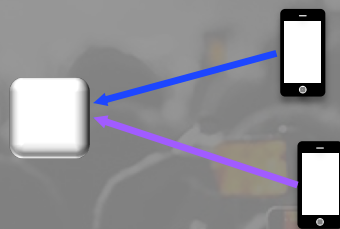
# 即將席捲全球的無線技術規格 802.11ax

更有效率



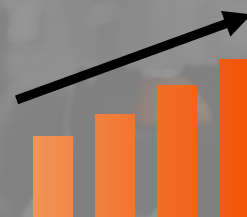
支援 OFDMA

更多設備



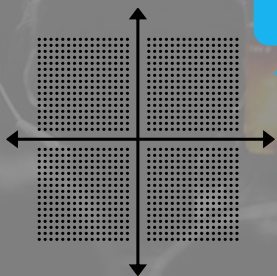
上行  
MU-MIMO

傳得更快



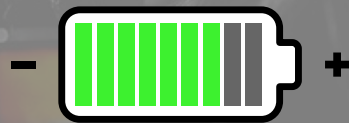
實體層及網路層效率提升

更有效率



更多相位 1024-QAM

用戶省電



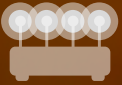
電源效率提升

更有效率



BSS 顏色識別技術

# OFDMA 如何提升傳輸效率



目前 WiFi 5 (11ac) 網路

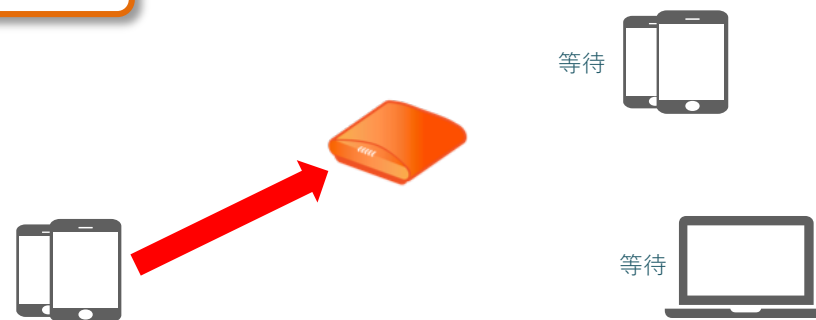
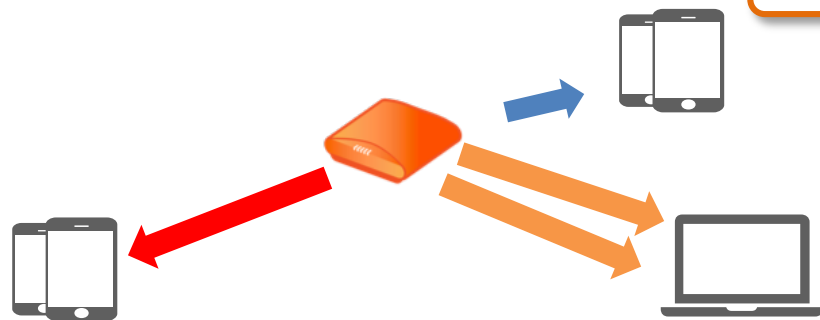
# OFDMA 如何提升傳輸效率



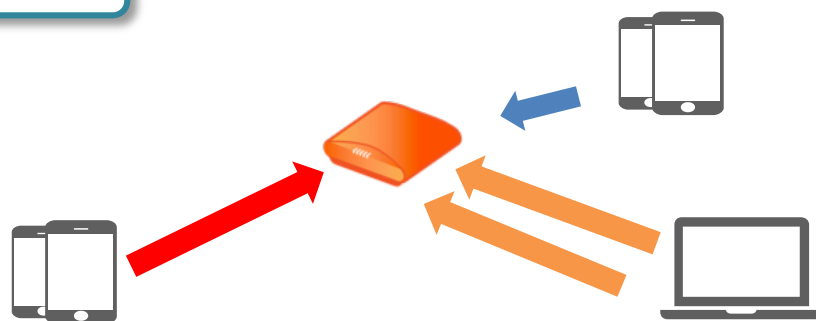
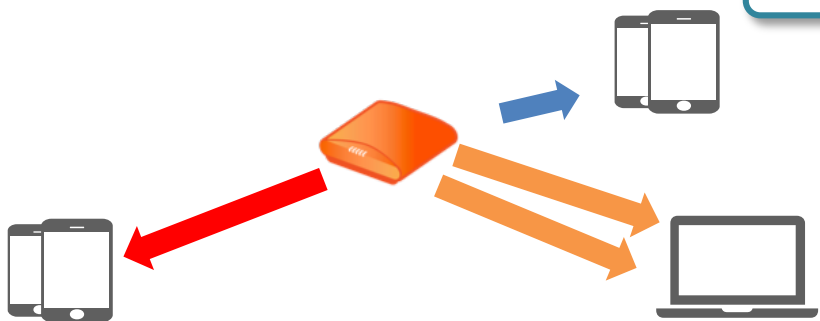
WiFi 6 網路(11ax)

# 上行 MU-MIMO

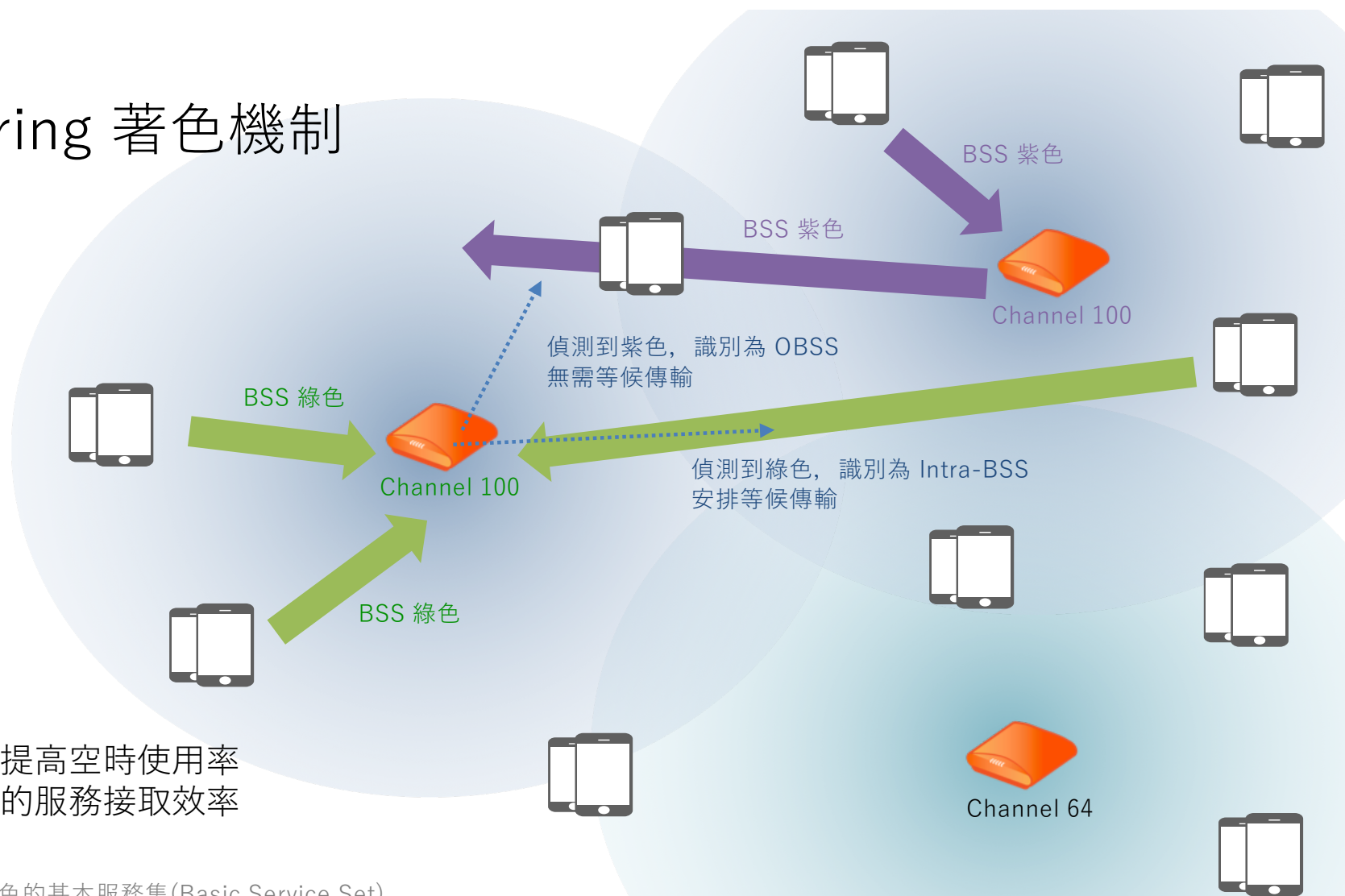
802.11ac 不支援上行 MU-MIMO



802.11ax 支援上行 MU-MIMO



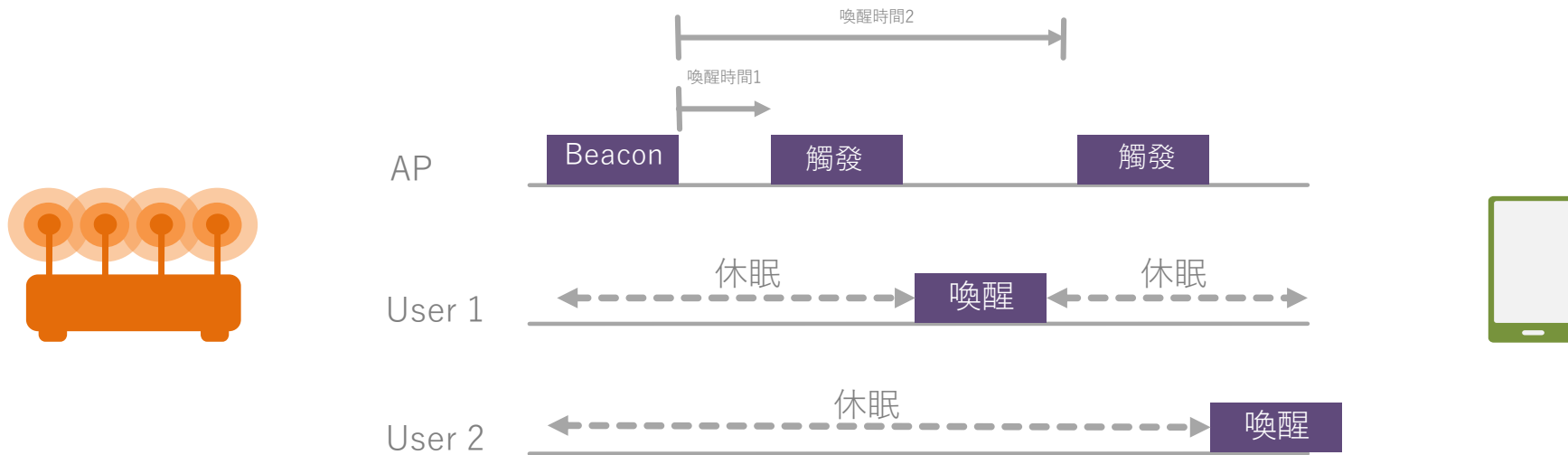
# BSS Coloring 著色機制



- 實現空間重複利用, 提高空時使用率
- 提升高密度部署環境的服務接取效率

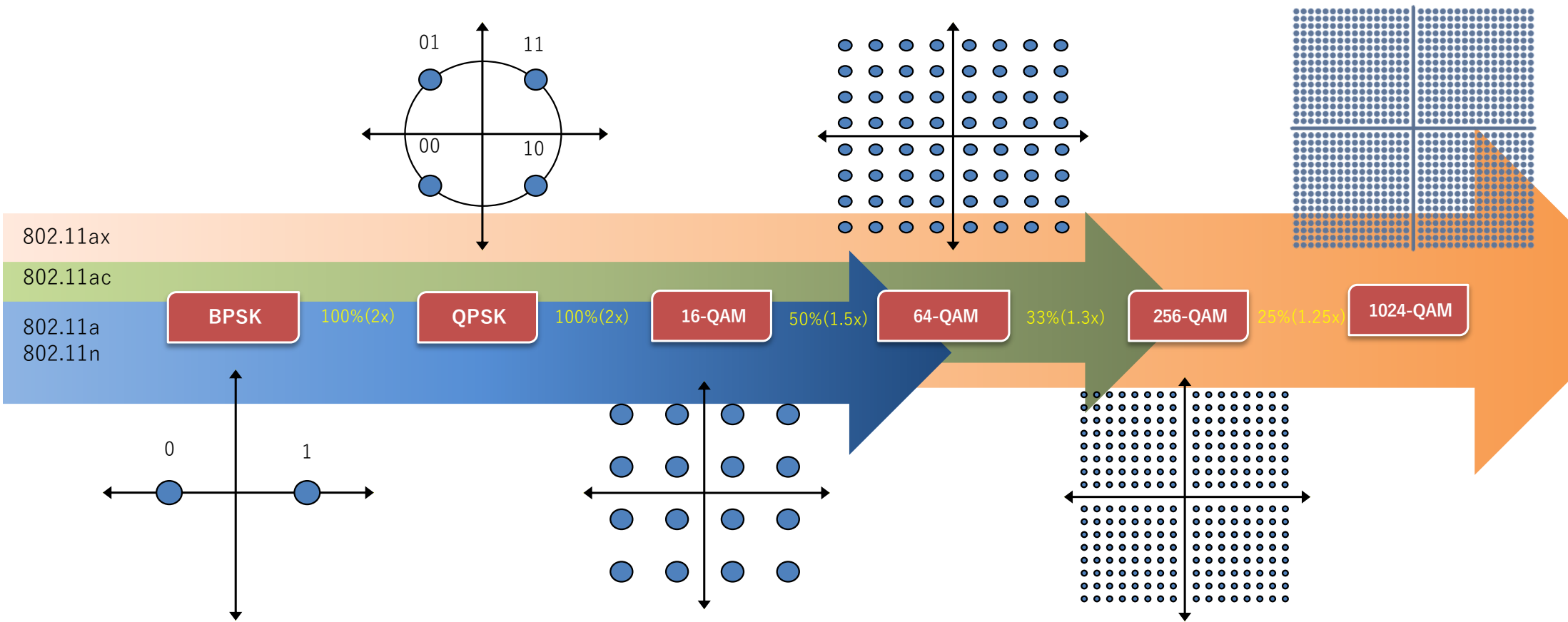
OBSS (Overlap BSS) : 重疊頻道非同色的基本服務集(Basic Service Set)

# 強化設備省電機制 Target Wake Time (TWT)



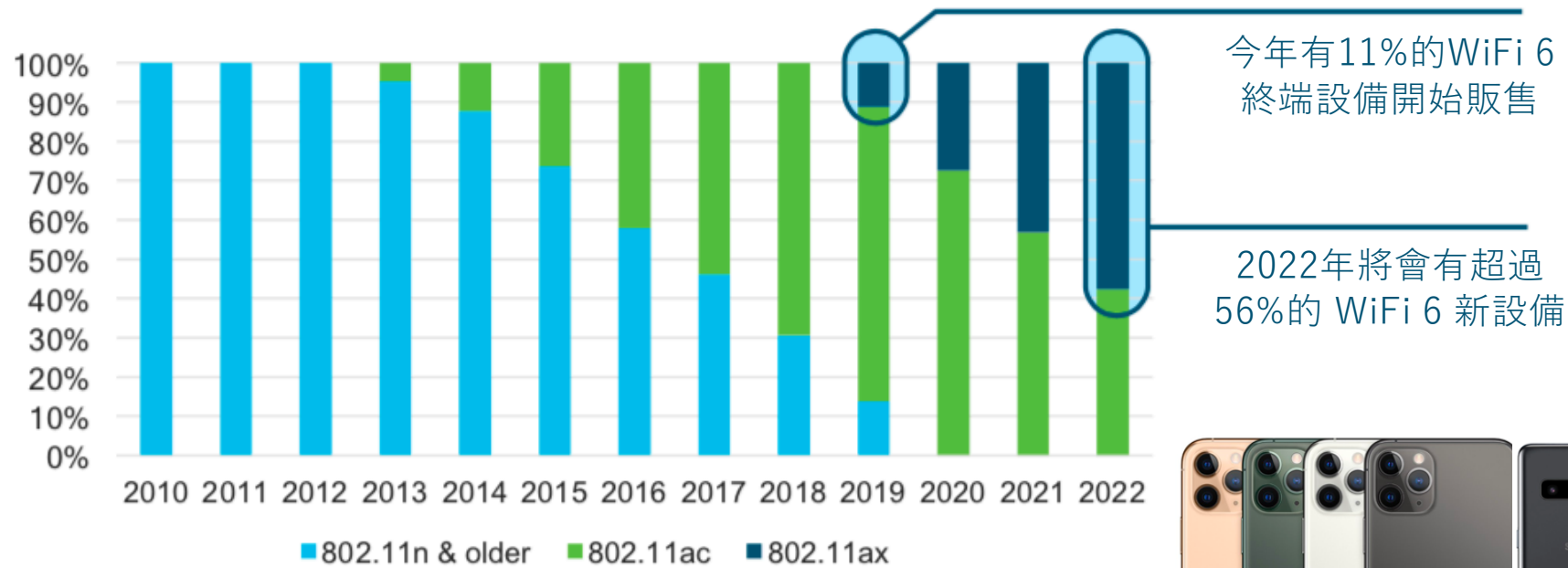
- 基地台會跟裝置協商，並且相互定義喚醒各自的時間
- 減少每個用戶端的爭用跟重疊時間
- 大幅增加設備休眠時間，以減少耗電

# 11ax 更密集的相位偏移調變模式



# 再不開始準備 WiFi 6，就真的慢了

## 802.11ax 終端設備成長指數





# Ruckus 無線技術 & 產品

# 需要改變的是天線

*Ruckus 全新的天線設計突破了無線網路的最大瓶頸*

傳統的散射性天線  
針對終端設備信號源不一致  
(everyone else)



亮度不足的燈泡

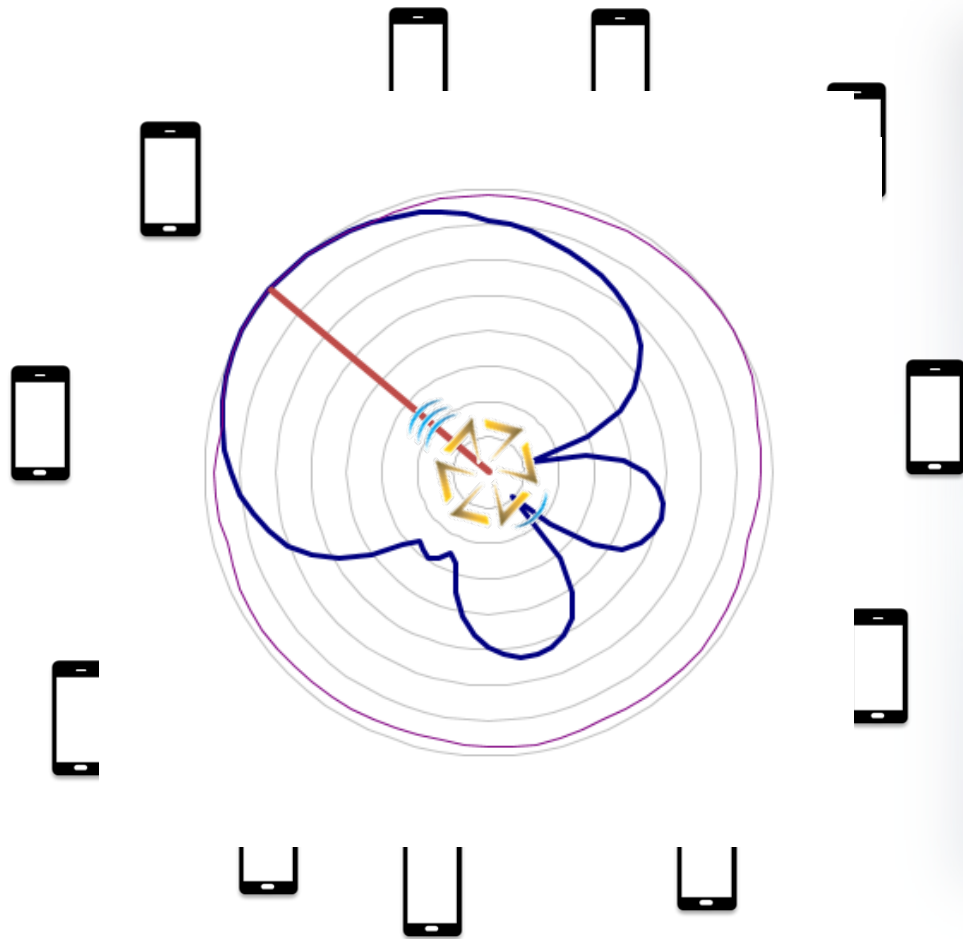


指向式智慧型天線  
針對終端設備提供最佳的訊號  
(Ruckus)



聚焦方向的探照燈

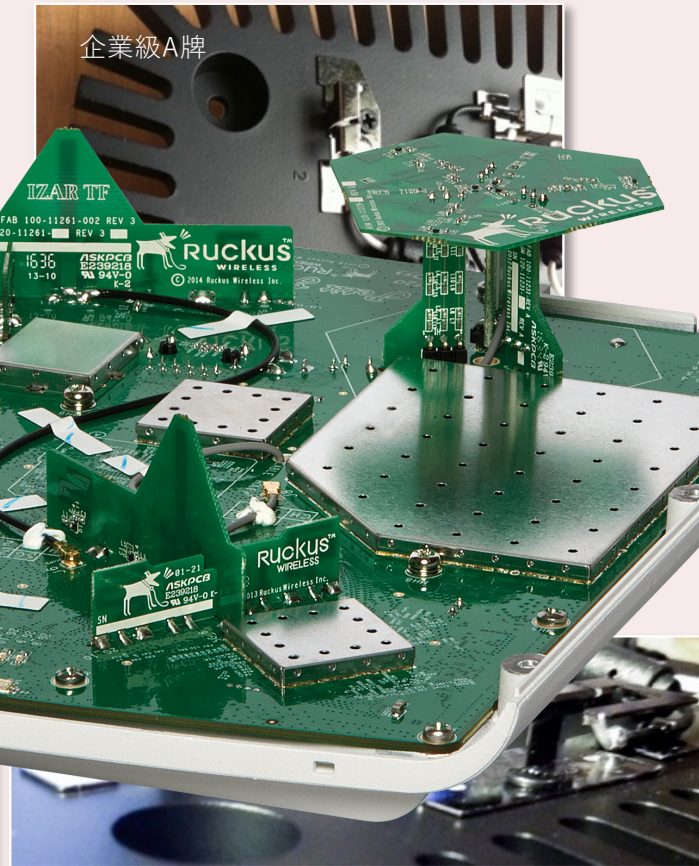
## 關鍵來自於專利 BeamFlex 技術



- 依終端的每個封包選擇傳輸的天線元素
- 適應天線適時地將資料傳遞到特定方位
- 指向天線能夠更加強力將訊號送往用戶端
- 針對周邊基地台跟用戶降低更少的干擾



# 來看看用料跟設計的差異



BeamFlex 智慧型矩陣天線

平面型倒F天線(Planar inverted-F antenna)(簡稱 PIFA)

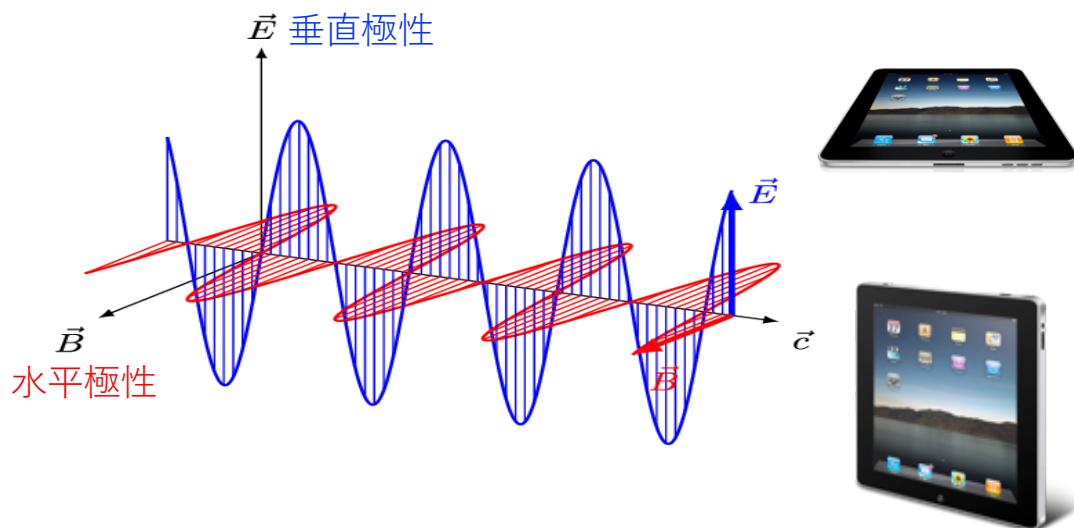
# 手持行動設備可以調整方向，但基地台的天線呢？

5x

因應設備角度，決定溝通天線極性，可以有效提升將近5倍的效率



- 更好的接收能力：
  - 專利天線偏振分極技術(PD-MRC)讓手持設備能夠更清晰的接收訊號
- 更好的傳輸能力：
  - 依據設備角度給予正確的資料傳輸波型，可有效提高傳輸率

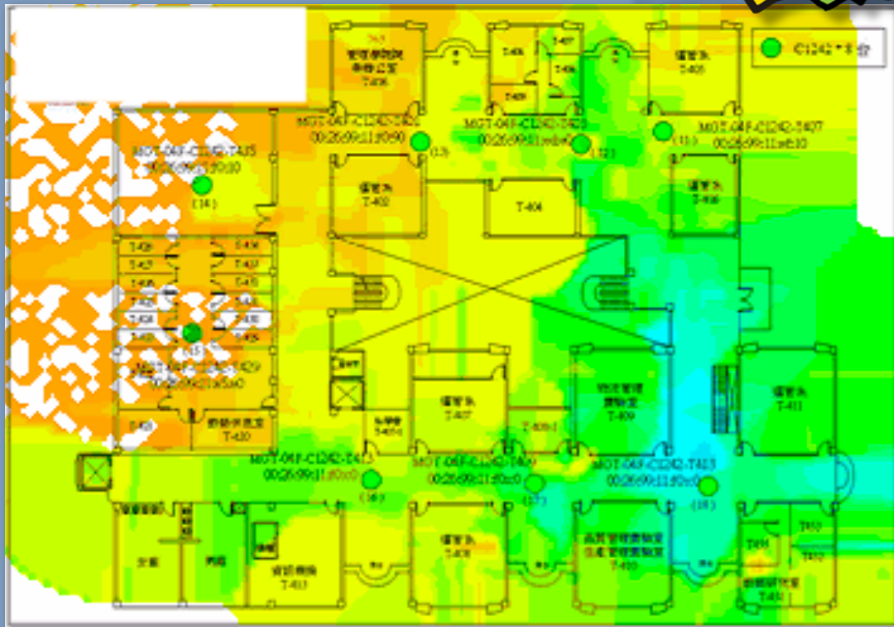


# Ruckus 給您涵蓋範圍更大的無線連線

實際大樓平面涵蓋分佈測試

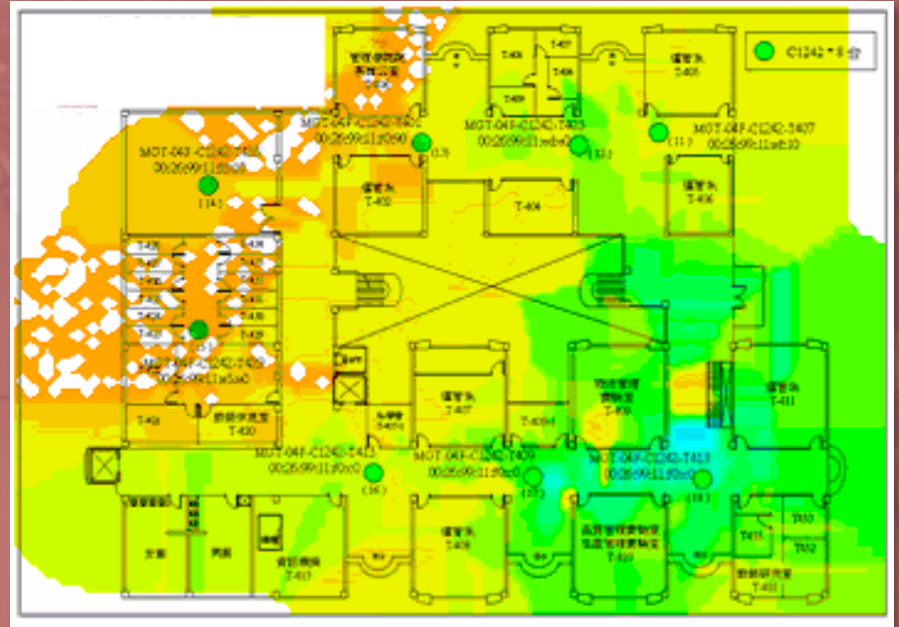
**WIN!**

Ruckus 涵蓋範圍



V.S

企業級 他牌 涵蓋範圍



# CommScope Ruckus 智慧網路全產品架構



軟體保固支援服務

Ruckus Cloud



Ruckus Analytics



Yagna® 雲端無線  
評估系統



行動設備  
APPS



IoT Suite  
物聯網套件

無線管理系統

- FlexMaster
- UMM(Unleashed Multi-Site Manager)



Cloudpath 入網認證系統



SmartCell Insight 無線分析系統



SPoT 智慧定位分析系統



Unleashed 可互管型基地台



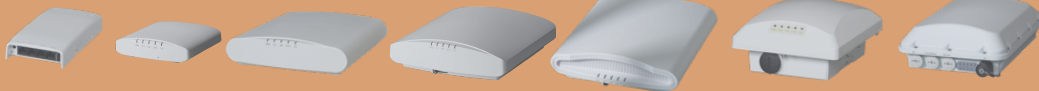
ZoneDirector 無線控制器



SmartZone 無線控制器



Smart Zone DP



無線網路  
基地台








無線橋接  
基地台



ICX 交換器



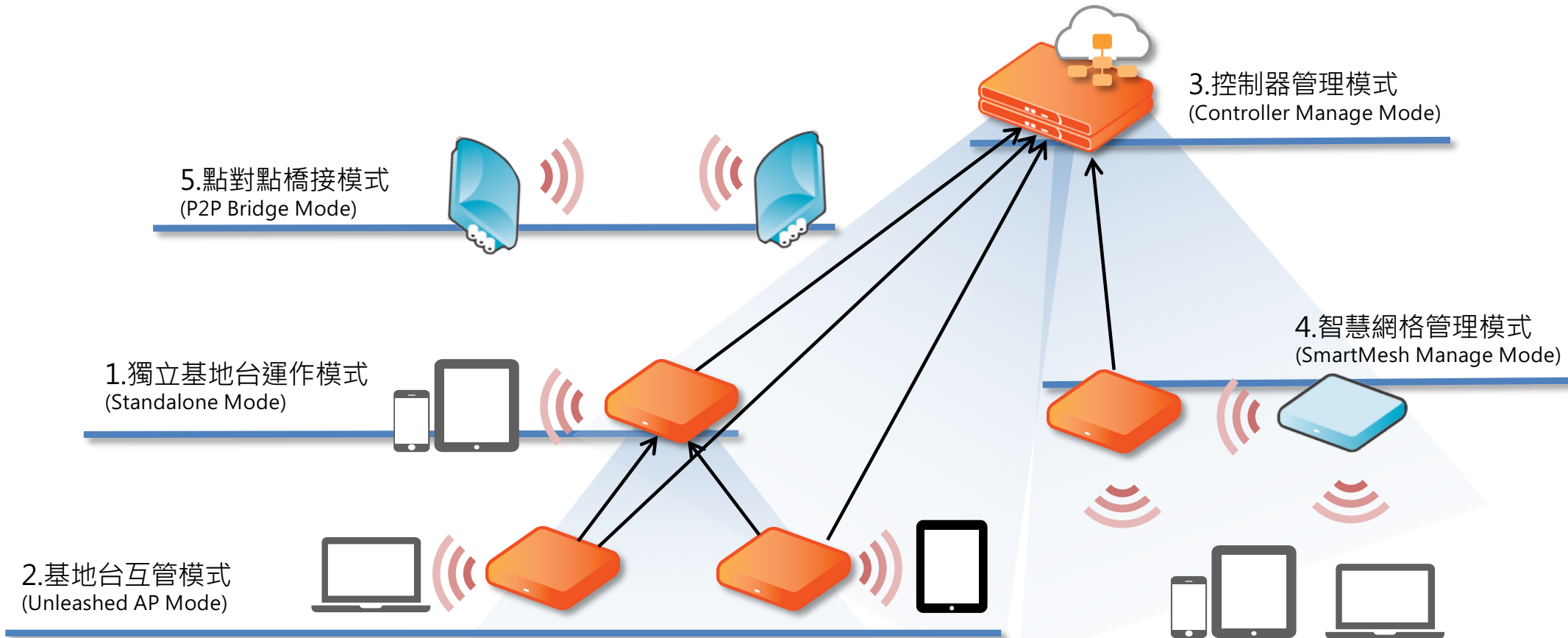
# Ruckus 全系列無線網路基地台

WiFi 6 802.11ax	8 x 8 : 8		R730 	R850 										
	4 x 4 : 4		R750 	R650 	T750 		R750 							
	2 x 2 : 2		R550 											
WiFi 5 801.11ac MU-MIMO	4 x 4 : 4		R710 	R720 	T610 	T710 	R710 	R720 	T610 	T710 				
	3 x 3 : 3		R610 				R610 							
	2 x 2 : 2	H510 	H320 	R320 	R510 	M510 	T310 	E510 	P300 	H510 	H320 	R510 	T310 	E510 
無線規格	壁掛型基地台 In Wall AP	室內型基地台 Indoor AP	戶外型基地台 Outdoor AP	戶外橋接基地台 Outdoor Bridge	可互管基地台 Unleashed AP									

# Ruckus 控制器種類跟授權數

	小型架構		中小型架構		中大型架構		大型架構	
								
	Unleashed		ZD 1200		SZ-100		vSZ-E	
	200.6	200.7	Version 9	Version 10				
	25	50	75	150				
管理AP數:	512		2000		1,024		10,000	
管理用戶數:	1024		4000		25,000		150,000	
設備大小:	無控制器		桌上型		1RU		2RU	
穿隧容量:	不支援		200Mbps		10 Gbps		40 Gbps	
備援機制:	所有AP皆備援		Active-Standby		3+1 叢集 (Cluster)		3+1 叢集 (Cluster)	
管理AP數:					3,000		30,000	
管理用戶數:					60,000		450,000	
部署類型	小型單位(SMB) 單據點		中小型單位 多據點		中大型單位 企業多據點		中大型單位 企業多據點	
					服務供應商 管理服務		服務供應商 管理服務	

# Ruckus 多種彈性設計帶來更多效益



# Ruckus ICX 全系列交換器

初階 邊際存取

中階 匯聚 / 存取

高階 匯聚 / 核心

價格

10G SFP+ 上行 / 堆疊

40G QSFP 上行 / 堆疊

100G QSFP28 上行 / 堆疊

40G QSFP 上行 / 堆疊

100G QSFP28 上行 / 堆疊

## ICX 7150 Z-Series

- + High Availability
- + Multi-gigabit (2.5 GbE)

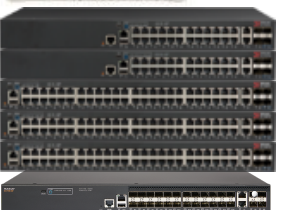


new product

## ICX 7150



new product



new product

- + 12/24/48-Port
- + PoE/PoE+ or non-PoE

## ICX 7250



- + 8xSFP+ uplinks
- + L3: VRF/GRE
- + EEE
- + PoE/PoE+ or non-PoE

## ICX 7450



- + 10G/40G Modules
- + Hot-swap PSU & Fans
- + L3: BGP
- + PoE/PoE+ or non-PoE

## ICX 7650



- + 10G/40G/100G
- + Hot-swap PSU & Fans
- + Multigigabit 2.5/5/10G
- + MCT

## ICX 7750



- + High density 10G/40G
- + Hot-swap PSU & Fans
- + Campus Fabric Control Bridge
- + MCT

## ICX 7850



new product

- + High density 10G/25G/40G/100G
- + Hot-swap PSU & Fans
- + High density 10G MACsec
- + MCT
- + Campus Fabric Control Bridge

Function and Scalability





# ZoneFlex

# 初始設定-如何恢復原廠預設值

- 在實體介面  
reset 戳孔10~15秒




\*Ruckus 全系列AP預設IP:192.168.0.1與登入帳號super/sp-admin

Ruckus Wireless Admin

https 192.168.0.1/login.asp

Apple iCloud Facebook YouTube Twitter 維基百科 Yahoo 新聞 熱門



### Ruckus Wireless Admin

Username:

Password:

goahead  
**WEB SERVER**

網路

顯示全部

位置: 自動

- 乙太網路 已連線
- Wi-Fi 已連線
- FireWire 未連線
- 藍牙 PAN 未連線
- Thund...it 橋接器 未連線

狀態: 已連線  
目前正在使用「乙太網路」, 且 IP 位址為 192.168.1.131 \*

設定 IPv4: 手動

IP 位址: 192.168.0.131

子網路遮罩: 255.255.255.0

路由器: 192.168.0.254

DNS 伺服器:

搜尋網域:

**Status**

- Device
- Internet
- Local Subnets
- Wireless

**Configuration**

- Device
- Internet
- Local Subnets
- Wireless
- Ethernet Ports
- Hotspot

**Maintenance**

- Upgrade
- Reboot / Reset
- Support Info

**Administration**

- Management
- Diagnostics
- Log

**Status :: Device**

Need Help?

**Device Name:** RuckusAP  
**Device Location:**  
**GPS Coordinates:**  
**MAC Address:** C4:01:7C:29:C7:D0  
**Serial Number:** 321204011635  
**Software Version:** 9.7.1.0.30  
**Uptime:** 9 mins 49 secs  
**Current Time (GMT):** Fri May 30 02:47:36 2014

LAN Port Status <a href="#">Refresh</a>					
Port	Interface	802.1X	Logical Link	Physical Link	Label
0	eth0	None	Down	Down	10/100
1	eth1	None	Down	Down	10/100
2	eth2	None	Up	Up 1000Mbps full	10/100/1000 PoE



Status

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Configuration

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## Configuration :: Internet

Need Help?

NTP Server:

Management VLAN:  ( Need to reboot for change to take effect )

IPv4 Connection Type:  DHCP  Static IP  PPPoE

Internet Connection Settings

IPv4 Address:	<input type="text" value="192.168.1.149"/>
IPv4 Subnet Mask:	<input type="text" value="255.255.255.0"/>
IPv4 Gateway:	<input type="text" value="192.168.1.254"/>

IPv4 DNS Mode :  Auto  Manual

IPv6 Connection Type:  Auto Configuration  Static IP

IPv6 Primary DNS Server:

IPv6 Secondary DNS Server:

### L2TP Connection

L2TP Connection:  Enable  Disable

[Restore previous settings](#)



Status

- Device
- Internet
- Local Subnets
- Wireless

Configuration

- Device
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- Management
- Diagnostics
- Log

Configuration :: Radio 2.4G :: Common

- Common
- Wireless 1
- Wireless 2
- Wireless 3
- Wireless 4
- Wireless 5
- Wireless 6
- Wireless 7
- Wireless 8

Need Help?

Wireless Mode: 2.4GHz (802.11b/g/n) ▾

Channel: SmartSelect ▾

Channel Width: 20 MHz ▾

Country Code: Taiwan ▾

Advanced Settings: [Edit Common Settings](#)

AeroScout RFID

AeroScout RFID tag detection:  Disabled  Enabled

Ekahau RFID

Ekahau Settings:  Disabled  Enabled

ERC IP Address:  ERC Port:

[Update Settings](#) [Restore previous settings](#)



Status

- Device
- Internet
- Local Subnets
- Wireless

Configuration

- Device
- Internet
- Local Subnets
- Wireless
- Ethernet Ports
- Hotspot

Maintenance

- Upgrade
- Reboot / Reset
- Support Info

Administration

- Management
- Diagnostics
- Log

### Configuration :: Radio 2.4G :: Wireless 1

- Common
- Wireless 1
- Wireless 2
- Wireless 3
- Wireless 4
- Wireless 5
- Wireless 6
- Wireless 7
- Wireless 8

Need Help?

**Wireless Network:**

**Wireless Availability?**  Enabled  Disabled

**Broadcast SSID?**  Enabled  Disabled

**SSID:**

**Threshold Settings:**

**Rate Limiting:**

**Access Control:**

**Packet Forward:**

**Hotspot Service:**

**Access VLAN:**

**Dynamic VLAN:**  Enabled  Disabled

**Insert DHCP option 82?**  Enabled  Disabled

**Client Fingerprinting?**  Enabled  Disabled

**Encryption Method:**

**WPA Version:**  WPA  WPA2  WPA-Auto

**WPA Authentication:**  PSK  802.1x  Auto

**WPA Algorithm:**  TKIP  AES  Auto

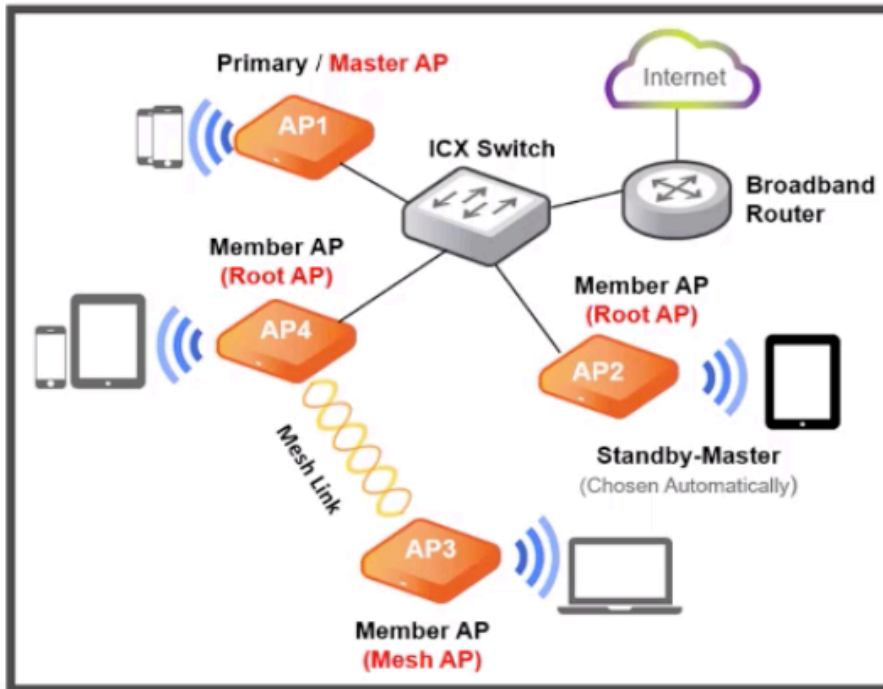
**Passphrase:**



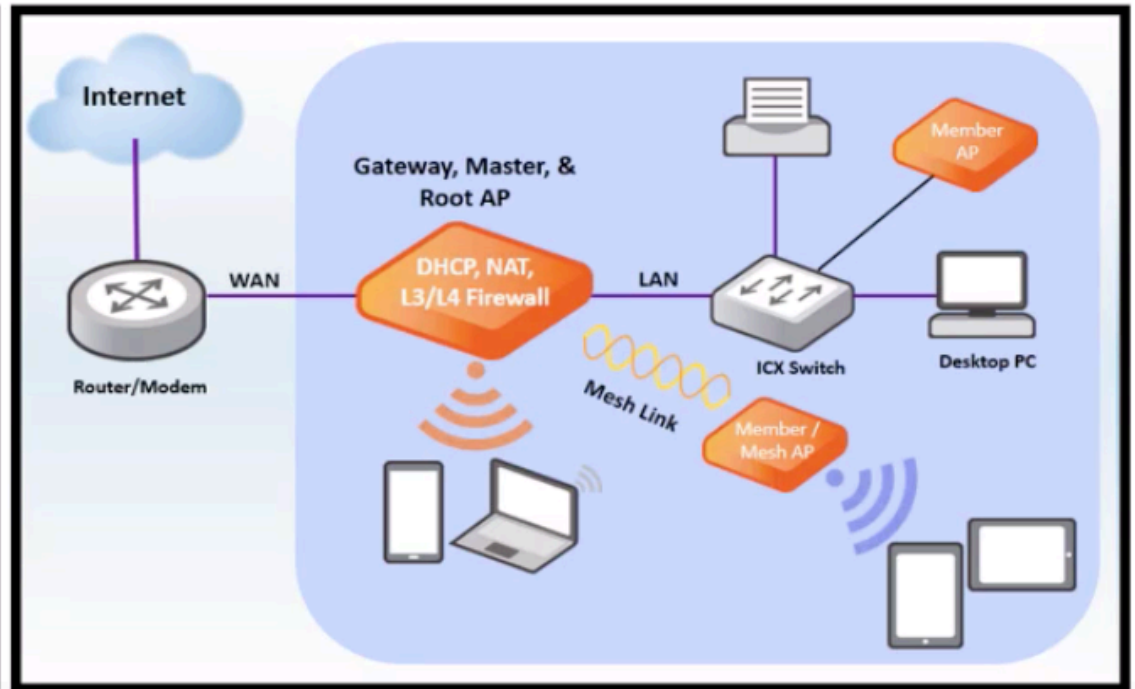


# Unleashed

# Unleashed Deployment mode



Typical Install Mode also Called the Bridge Mode



Master AP in a Gateway Mode.

Master AP can only support 100 clients

# Support version (200.x)



Ruckus R610

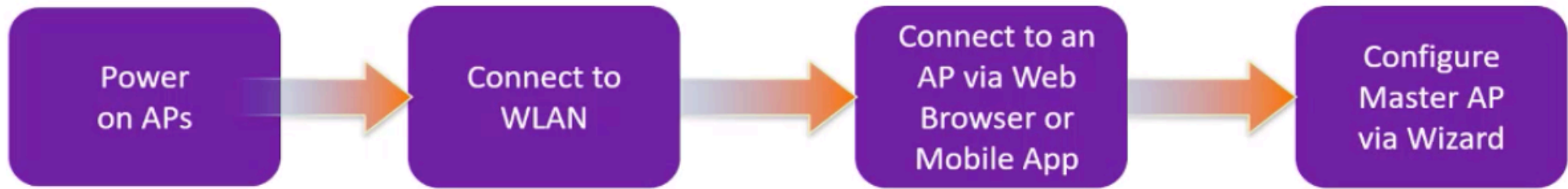


Documents Downloads Security Bulletins KB Articles Forum Topics NEW Advanced Search

Search:  Show  All Versions  No Version #

Name	Release Version	File Type	
<a href="#">Ruckus Unleashed AP 200.8.10.3.290 (MR Refresh2) SNMP MIBs</a>	200.8.10.3.290	ZIP	200.9
<a href="#">Ruckus Unleashed AP 200.8.10.3.290 (MR Refresh2) Software for R610</a>	200.8.10.3.290	BL7	<b>200.8</b>
<a href="#">Ruckus Unleashed AP 200.7.10.202.121 (MR Refresh5) Software for R610</a>	200.7.10.202.121	BL7	200.7
<a href="#">Ruckus Unleashed AP 200.9.10.4.202 (GA Release) SNMP MIBs</a>	200.9.10.4.202	ZIP	200.6
<a href="#">Ruckus Unleashed AP 200.9.10.4.202 (GA Release) Software for R610</a>	200.9.10.4.202	BL7	114.0
<a href="#">Ruckus Unleashed AP 200.7.10.202.118 (GA Refresh4) Software for R610</a>	200.7.10.202.118	BL7	110.0
<a href="#">Ruckus Unleashed AP 200.8.10.3.278 (GA Refresh) Software for R610</a>	200.8.10.3.278	BL7	104.1
<a href="#">Ruckus Unleashed AP 200.8.10.3.278 (GA Refresh) SNMP MIBs</a>	200.8.10.3.278	ZIP	5.2
			5.1

# Config flow



Configure.Me  
WLAN

**RUCKUS**

### Setting up Unleashed

1. Turn ON your AP and wait for few mins.
2. Set your mobile Wifi to "Configure.Me-xxxxx".
3. Press "start" button or "voice install" link below.

Help, I don't see Configure.Me Wifi

Unleashed.ruckuswireless.com

**RUCKUS**

1 System 2 IP setting 3 Wireless LAN 4 Administrator 5 Review

Version: 2017.80.2.222

Language: English

Mesh:

Mesh Name (SSID): Mesh-4455667788

Mesh Password: Dv4567890123456789

Select the display language that you want to see on the Web interface.


Name your system IP characters may only alphanumeric characters excluding space.

Select this check box to enable Mesh for the Unleashed Network.

Each mesh-enabled Unleashed requires a unique namedSSID for the mesh APs for the backbone APs.

Defaults

# Config flow.



Unleashed Installation

Version: 200.8.10.3.118

\* **Language**  Select the display language that you want to use on the Web interface.


**Typical Install** This is the most typical way to install if one do not want to use UMM

**UMM Install** Use image from UMM to install an Unleashed network

\* UMM Domain/IP:  UMM address from where the Unleashed Network can retrieve configuration

Config Template Name:  Configuration template pre-stored in UMM for the Unleashed Network

**Local Upgrade** Upgrade this Unleashed AP from a local image file



# Config flow.



1

System

2

IP setting

3

Wireless LAN

4

Administrator

5

Review

Gateway Mode

WAN IP Address ▼

Manual

DHCP

\* IP Address

\* Netmask

\* Gateway


\* Primary DNS Server

Secondary DNS Server

# Config flow.

**\* Name (ESSID):**  Name your own wireless LAN. The name will be shown in wireless LAN list. It will be shown as "Ruckus-Wireless 1" without changing.

**Password Protect (WPA2):**  Yes  No

 It is *highly recommended* setting password protection for wireless LAN. So only authorized users can join. Password can only contain between 8 and 64 characters and no spaces are allowed.

Back

Next

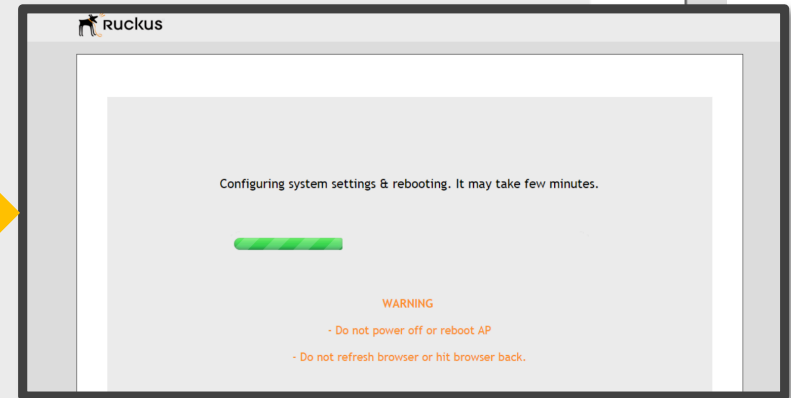


# Config flow.



Review the information below and click Finish to configure

<b>System Name</b>	Unleashed
<b>Internal Gateway</b>	Disabled
<b>IP Mode</b>	Dynamic (DHCP)
<b>IP setting</b>	192.168.0.4
<b>Wireless LAN</b>	Unleashed
<b>Admin Username</b>	admin
<b>Admin Password</b>	***** <input type="checkbox"/> show password
<b>Password Recovery</b>	Disabled
<b>Mesh</b>	Mesh-941849001125
<b>System Time</b>	System time will be automatically set. (Your current PC time is 10/19/2018, 10:55:54 AM)



# Unleashed 管理介面

The screenshot displays the Ruckus Unleashed management interface. At the top left is the Ruckus logo, an ARRIS company, with the text 'UNLEASHED'. The top center shows the system name 'Unleashed' and the up time '7d 23h 55m'. The top right contains user information 'admin' and links for 'Help' and 'Log Out'. The main content area is divided into several sections: Internet (Connected), WiFi Networks (Traffic: 6.61 MB, Total 1, Working 1, Disabled 0), Clients (Total 5, Connected 5, Disconnected 0), Access Points (Total 1, Working 1, Disconnected 0), and Switches (Total 0, Working 0, Disconnected 0). Red annotations highlight the Ruckus logo (3), the system name and up time (1), and the user information (2).

**3** RUCKUS<sup>™</sup>  
an ARRIS company UNLEASHED

**1** System Name: Unleashed Up Time: 7d 23h 55m

**2** admin Help  
Log Out

Component	Status	Total	Working	Disconnected
Internet	Connected	-	-	-
WiFi Networks	Traffic: 6.61 MB	1	1	0
Clients	Clients	5	5	0
Access Points	-	1	1	0
Switches	-	0	0	0

# Unleashed-System

**System** ▼

- System Info**
- IP Settings
- System Time
- Country Code
- Roles
- Users
- Mesh

**Services** ▶

**Administration** ▶

System Info

Name\*

System Version

Unleashed ID

Preferred Master

Upon applying this change, the Primary Preferred Master AP will become the Master AP and the previous Master AP will be rebooted to become a Member AP, the selected Secondary Preferred Master will become Master once Primary Preferred Master is down. Please note there may be a brief network disruption when changing Master AP.

Primary Preferred Master  No Preference

Secondary Preferred Master  RuckusAP[R510 - 8c:fe:74:3e:b2:70]

Disable WLAN service on Master AP  If the Unleashed Network contains 3 or more connected APs, the Master AP will not provide WiFi service

Switch Approval

Approval  Automatically approve all join requests from switches.

# Unleashed-System.

**System** ▼

- System Info
- IP Settings**
- System Time
- Country Code
- Roles
- Users
- Mesh

**Services** ▶

**IP Settings** Management Interface DHCP Assigned Address DHCP Reserved Address

IP Settings

If Unleashed was assigned static network addressing, click "Manual" and make the correct entries. If you click "DHCP", no "Manual" entries are needed.

Gateway Mode

WAN IP Address ▼ LAN & WLAN Client IP Addresses ▼

Manual  DHCP **DHCP Server**

\* IP Address  \* Starting IP

\* Netmask  \* Ending IP

\* Gateway  **Number of IPs**

\* Primary DNS Server  **Lease Time**

Secondary DNS Server

# Unleashed-System.

**System** ▼

- System Info
- IP Settings
- System Time**
- Country Code
- Roles
- Users
- Mesh

### System Time

Click Refresh to update the time displayed on this page. Click Sync Time with Your PC to manually synchronize the internal Unleashed clock with your administrative PC clock.

Current Unleashed system time is **8/11/2020 14:38:11** Your browser's current time is **8/11/2020 14:38:11**

**Use NTP to synchronize the Unleashed clock automatically**

NTP Server\*

**System defined**  **User defined**

Select time zone for your location:

# Unleashed-System.

**System** ▼

- System Info
- IP Settings
- System Time
- Country Code**
- Roles
- Users
- Mesh

Country Code

Different countries have different regulations on the usage of radio channels. To ensure that Unleashed is using an authorized radio channel, select the correct country code for your location.

**Country Code:**

**Channel Mode:**  **Allow indoor channels**(Allow Outdoor AP to use indoor channels)

調整Country code設備必須重開

# Unleashed-Service

**System** ▶

**Services** ▼

- AAA Servers**
- Access Control
- Application Recognition & Control
- Bonjour Gateway
- Dynamic PSK

**Authentication Servers** | Test Authentication Servers Settings

This table lists all authentication mechanisms that can be used whenever authentication is needed.

[+ Create](#) [Edit](#) [Clone](#) [Delete](#)  [Q](#) [↺](#) [⚙](#)

Name	Type	IP Address	Port	Encryption
No data available.				

0-0 of 0 shown [«](#) [1](#) [»](#)

**System** ▶

**Services** ▼

- AAA Servers**
- Access Control
- Application Recognition & Control
- Bonjour Gateway
- Dynamic PSK

**Authentication Servers** | **Test Authentication Servers Settings**

You may test your authentication server settings by providing a user name and password here. Groups to which the user belongs will be returned and you can use them to configure the role.

**Test Against**

**Username**

**Password**  [👁](#)

**Success!** The user will be assigned a role of "Default". [Test](#)

# Unleashed-Service.

Create New



\* **Name**

**Type**  Active Directory  RADIUS  RADIUS Accounting

**Encryption**  TLS

**Auth Method**  PAP  CHAP

**Backup RADIUS**  Enable Backup RADIUS support

\* **IP Address**

\* **Port**

\* **Shared Secret**

\* **Confirm Secret**

Retry Policy

\* **Request Timeout**  seconds

\* **Max Number of Retries**  times

OK

Cancel

# Unleashed-AP

The screenshot displays the Unleashed-AP management interface. At the top, a summary bar shows 'Total 1', 'Working 1', and 'Disconnected 0' access points. Below this, a search bar and a 'Data duration' dropdown (set to 1 hour) are visible. The main content area is divided into two sections: a summary for all access points and a detailed view for a specific RuckusAP.

**Summary - Total 1 Access Points**

0	0	1
Clients		

**RuckusAP [8c:fe:74:3e:b2:70]**

**0 Clients**

**6 WLANs**

**Events & Alarms**

**Client Status for last 1 hour**

Legend: Excellent (Blue), Moderate (Light Blue), Poor (Red)

Time	Excellent	Moderate	Poor
14:35	0	0	0
14:40	1	0	0
14:45	0	0	0
14:50	0	0	0
14:55	1	0	0
15:00	0	0	0
15:05	0	0	0
15:10	0	0	0
15:15	1	0	0
15:20	1	0	0

Red boxes highlight the following elements:

- Total, Working, and Disconnected counts at the top.
- The 'Master' status label for the selected AP.
- The 'Show Clients Info', 'Show WLANs Info', 'Show System Overview Info', and 'Show Events & Alarms' buttons.

# Unleashed-AP.

1

Ruckus-U..[...35:c9:40] Master

0 0 3 Clients Traffic 2.4G 5G

3 Clients

2 WLANs

Show Clients Info ▶

Show WLANs Info ▶

Hide System Overview Info ▼

Device Name	Ruckus-Unleashed
Status	Connected
Uptime	5m 9s
Description	
Location	
Mac Address	d4:c1:9e:35:c9:40
IP Address	192.168.0.14
Model	R610
S/N	941849001125
Group Name	System Default
GPS Coordinates	
Mesh Type	Disabled
Current Channel(802.11a/n/ac)	157

# Unleashed-AP.

GPS Coordinates	
Mesh Type	Disabled
Current Channel(802.11a/n/ac)	157
Current Channel(802.11b/g/n)	6
Power Consumption Mode	802.3at Switch/Injector
Max Clients	100
Version	200.9.10.4.110
Fixed Member Role	no
Download Logs	Logs 

## Ethernet Port Status

Port	Interface	Logic Link	Physical Link	Label
Port1	eth0	Up	Up 1000Mbps full	10/100/100
Port2	eth1	Down	Down	10/100/100

## Neighbor APs

Access Point	Channel	SNR
No data available.		

# Unleashed-WLAN

The screenshot displays the Ruckus Unleashed management interface. At the top left is the Ruckus logo with the text "an ARRIS company UNLEASHED". The system name is "Unleashed" and the up time is "3h 48m". The user is logged in as "admin" with options for "Help" and "Log Out".

The main content area is divided into sections:

- Internet:** Shows a globe icon, the word "Internet", and a blue "Connected" button.
- WiFi Networks:** Features a Wi-Fi icon, a traffic graph, and the text "Traffic: 0.07 MB". It includes summary statistics: "Total 1", "Working 1", and "Disabled 0". Below these are buttons for "Create" (highlighted with a red box), "Edit", "Disable", and "Delete". A "Data duration" dropdown is set to "1 hour".
- Summary - Total 1 WiFi Networks:** A summary card showing "0 Clients" and "1" in a blue box, with a traffic graph.
- Summary:** A larger summary card stating "1 WiFi Network(s) enabled, 0 WiFi Network(s) disabled." and "1 Client(s)" with a "Show Client(s) Info" link.
- Client Status:** A section titled "Client Status for last 1 hour" with a traffic graph.

# Unleashed-WLAN.

## Create WLAN



\* Name:

**Usage Type:**  Standard for most regular wireless network usage  
 Guest Access guest access policies and access control will be applied  
 Hotspot Service known as WISPr

**Authentication Method:**  Open  802.1X EAP  MAC Address

**Encryption Method:**  WPA2  WPA3  WPA2/WPA3-Mixed  OWE  None

**Web Authentication:**  Enable captive portal/Web authentication  
(Users will be redirected to a Web portal for authentication before they can access the WLAN.)

**Accounting Server:**

Send Interim-Update every  minutes

Show Advanced Options ►

OK

Cancel

# Unleashed-WLAN-PSK

Edit WLAN



**Name:**

**Usage Type:**  Standard for most regular wireless network usage  
 Guest Access guest access policies and access control will be applied  
 Hotspot Service known as WISPr

**Authentication Method:**  Open  802.1X EAP  MAC Address

**Encryption Method:**  WPA2  WPA3  WPA2/WPA3-Mixed  OWE  None

**Password:**  [Show password](#)

**Accounting Server:**

Send Interim-Update every  minutes

Show Advanced Options ►

OK

Cancel



# Unleashed-WLAN-802.1x

Edit WLAN



Name:

Usage Type:  Standard for most regular wireless network usage  
 Guest Access guest access policies and access control will be applied  
 Hotspot Service known as WISPr

Authentication Method:  Open  802.1X EAP  MAC Address

Encryption Method:  WPA2  WPA3

Authentication Server:

WLAN Survivability:

Cache time  hours

Accounting Server:

Send Interim-Update every  minutes

Show Advanced Options ►

OK

Cancel



# Unleashed-WLAN-802.1x

The screenshot displays the 'Admin & Services' interface for Unleashed-WLAN-802.1x. On the left, a navigation menu includes 'System', 'Services', and 'Administration'. The 'System' section is expanded, showing options like 'System Info', 'IP Settings', 'System Time', 'Country Code', 'Roles', 'Users', and 'Mesh'. The 'Users' option is selected, leading to the 'Internal User Database (on Unleashed)' page. This page features a table with one user entry, 'test', and a toolbar with 'Create', 'Edit', 'Clone', 'Delete', and 'Print' buttons. A search bar is also present. A 'Create New' dialog box is open in the foreground, containing the following fields: 'Username' (test), 'Full Name', 'Password', 'Confirm Password', and 'Role' (Default). The dialog has 'OK' and 'Cancel' buttons at the bottom right.

Admin & Services

System

- System Info
- IP Settings
- System Time
- Country Code
- Roles
- Users**
- Mesh

Services

Administration

Internal User Database (on Unleashed)

This table lists all current user accounts along with basic details. You can add, edit, or delete user accounts. You can also click the Print button to print out the First-time Wireless Network Connection Guide for the user.

+ Create Edit Clone Delete Print

Search

Username
test

### Create New

- Username: test
- Full Name:
- Password: .....
- Confirm Password: .....
- Role: Default

OK Cancel

# Unleashed-WLAN-Guest

Edit WLAN



Name:

- Usage Type:
- Standard for most regular wireless network usage
  - Guest Access guest access policies and access control will be applied
  - Hotspot Service known as WISPr

Onboarding Portal:  Enable Zero-IT device registration from the Guest Portal

Guest Authentication:  Guest Pass and Social Login  Social Login only  None

Guest Password:  Unique password for each guest

Please go to the following link and log in as guest pass admin to create unique password  
<https://unleashed.ruckuswireless.com/guestpass> & <https://192.168.106.2/guestpass>

Single shared password among all guest

Grace Period:  Allow users to reconnect without re-authentication for  minutes

Authentication Method:  Open  802.1X EAP  MAC Address

Encryption Method:  WPA2  WPA3  WPA2/WPA3-Mixed  OWE  None

Accounting Server:

Send Interim-Update every  minutes

Show Advanced Options ▶

Next

Cancel



# Unleashed-WLAN-Guest.

## Edit WLAN

**Social Media Logins:**  FacebookWiFi  
 Google/Google+  
 LinkedIn  
 Microsoft  
 WeChat

**GuestPass Self-Service:**  Enable guestpass self service

**User Redirection URL:**  Redirect to website user intends to visit  
 Redirect user to this website

**Terms and Conditions:**  Show terms and conditions

**Insert WiFi4EU Snippet:**  Insert WiFi4EU snippet in head tag of Portal page

**Customize Captive Portal:** Click on edit area to change each part of captive portal & preview to check the result



The preview shows a captive portal interface with the Ruckus logo at the top. Below the logo, it says "Welcome to Guest WiFi!". Underneath, there is a section titled "Connect to WiFi by Guest Pass" which includes a text input field and a blue "Connect" button. Small edit icons are visible over the interface elements.

# Unleashed-Client



Clients



Clients

Total 2

Connected 1

Disconnected 1

1 clients connected, 1 clients disconnected.

Wired Clients ?

0 wired clients connected

Wireless Clients

1 wireless clients connected

Show Details

Rename

★ Mark Favorite

★ Unmark Favorite

Troubleshooting

More ▾

Search



★	Mac Address	IP Address	Status	OS	Name	User	AP Name	WLAN
	90:8c:43:84:7f:6b	192.168.106.53	Unauthorized		Boen		RuckusAP	unleashed-guest209
	6c:8d:c1:b2:34:f0	192.168.106.51	Authorized		Frog-iPhone		RuckusAP	unleashed-psk

1-2 of 2 shown

« 1 »

# Unleashed-Client.

## Client Details



Name	Value
Host Name	Frog-iPhone
OS Vendor Type	Apple iOS
Device Model	iOS Phone
IP Address	192.168.106.51
MAC	6c:8d:c1:b2:34:f0
WLAN	unleashed-psk
AP Name	RuckusAP
AP MAC	8c:fe:74:3e:b2:70
Received from client	86 pkts / 8.2K bytes
Transmitted to client	60 pkts / 5.8K bytes
RSSI	-44 dBm
SNR	61 dB
Health	Excellent
BSSID	8c:fe:74:be:b2:7c
VLAN	1
Username	
Role	
Radio	802.11ac
Auth Method	Open
Encryption	WPA2
Auth Status	Authorized
Channel	157

# Unleashed-Client.

## Troubleshooting



\*Client MAC Address:

Please connect your client manually once troubleshooting is started. If the client is connected already, it will be disconnected by Unleashed.

Connectivity Trace

▶ Start

■ Stop

🗑️ Clear

📄 Import

📄 Export

Access Points hearing client's probe requests:

Name	Radio	Client SNR (dBm)	Latency (ms)	Connection Failure (%)	Airtime Utilization (%)
RuckusAP (8c:fe:74:3e:b2:70)	5GHz (157)	55	0	0.00	1
RuckusAP (8c:fe:74:3e:b2:70)	2.4GHz (1)	48	0	0.00	10

1-2 of 2 shown

« 1 »

# Unleashed-Client.

AP: **RuckusAP(8c:fe:74:3e:b2:70)** SSID: **unleashed-psk** Radio: **5GHz**

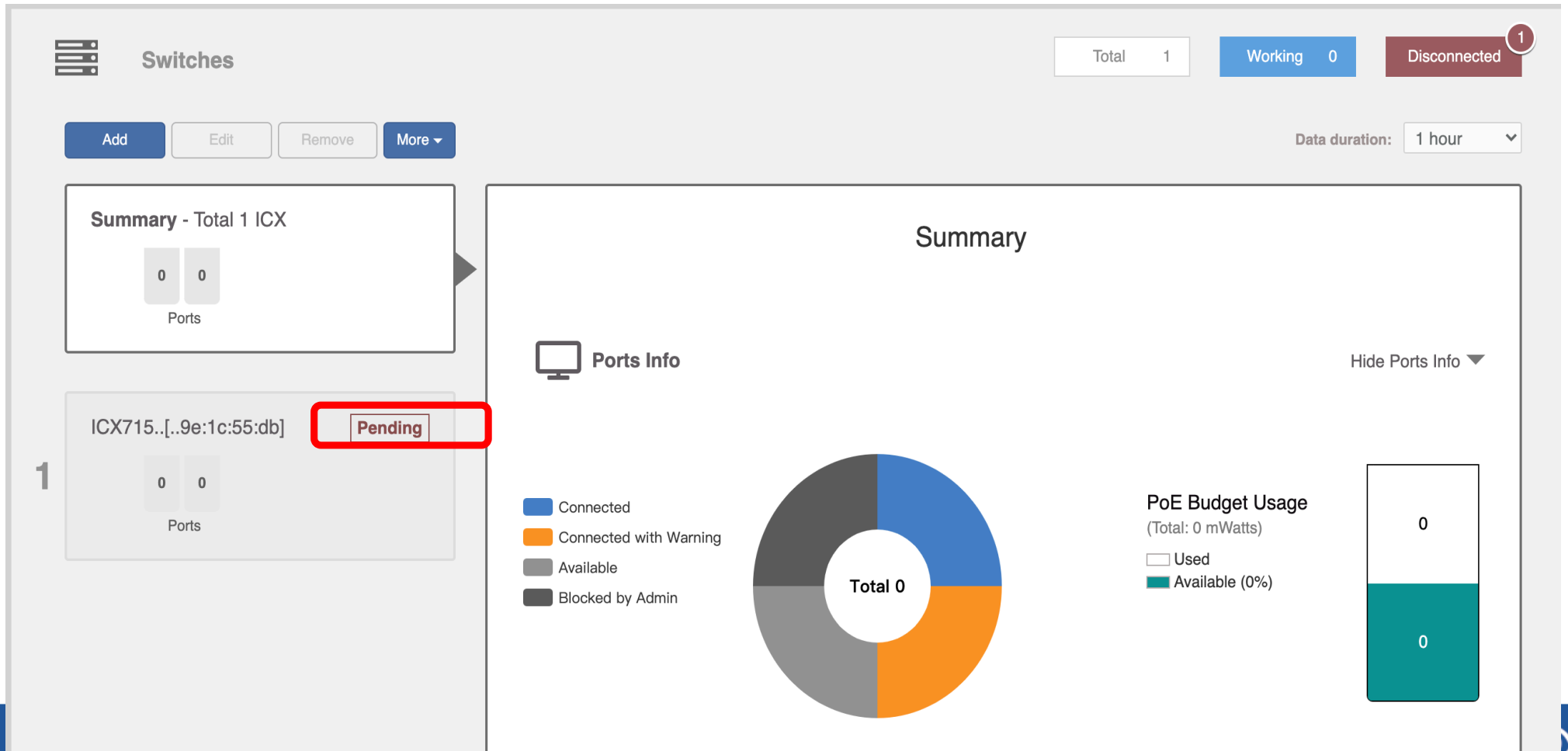


# Unleashed-Client.

AP: **RuckusAP(8c:fe:74:3e:b2:70)** SSID: **unleashed-psk** Radio: **5GHz**



# Unleashed-Switch



# Unleashed-Switch.

\* Unleashed system only supports ICX firmware version 08.0.90 or later.

ICX Switch is Pending to join

**Device Name:** ICX7150-48ZP

**MAC Address:** d4:c1:9e:1c:55:db

**IP Address:** 192.168.106.254

Unable to login to this switch with default credential, please provide admin user name & password of this switch to continue...

 Continue

switch account

Approve Switch Join Unleashed

Admin Name

Password

OK

Cancel

# Unleashed-Switch.

## Switches

Total 1 Working 1 Disconnected 0

Add Edit Remove More

Data duration: 1 hour

### Summary - Total 1 ICX

2 54  
Ports

### ICX7150-48ZP[d4:c1:9e:1c:55:db]

1 2 54  
Ports

### Summary

#### Ports Info

Hide Ports Info

- Connected
- Connected with Warning
- Available
- Blocked by Admin

Total 56

2

54

#### PoE Budget Usage

(Total: 740,000 mWatts)

- Used
- Available (98%)

15,400

724,600

#### Events & Alarms

Hide Events & Alarms

Events Alarms

Search

Date/Time	Severity	Activities
2020/08/11 14:38:32	High	ICX [d4:c1:9e:1c:55:db] joins.

# Unleashed-Switch.

Summary - Total 1 ICX



1 ICX7150-48ZP[d4:c1:9e:1c:55:db]



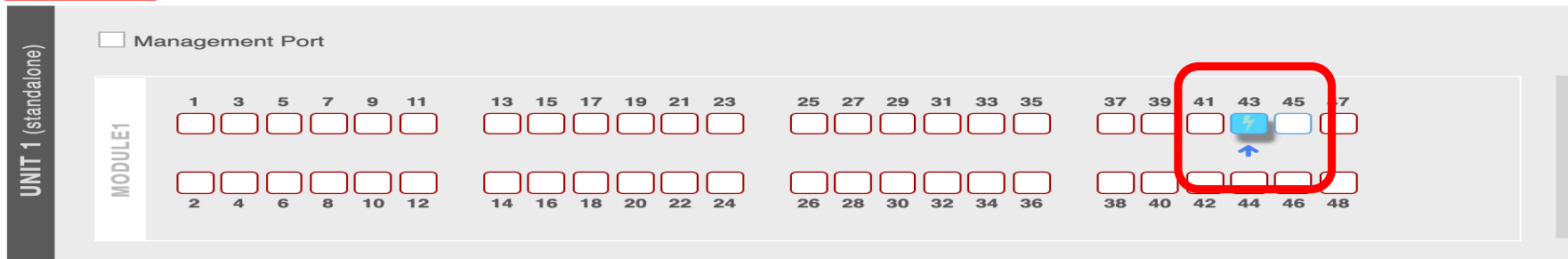
ICX7150-48ZP [d4:c1:9e:1c:55:db]

Hide General Info ▼

Name	ICX7150-48ZP
MAC Address	d4:c1:9e:1c:55:db
IP Address	192.168.106.254
Model	ICX7150-48ZP
State	Connected
Gateway	
Version	SPR08092d
Serial Number	FJN3215P04L
Last Seen	2020/08/11 14:48:33
Up Time	4h 39m

# Unleashed-Switch.

Reset Port



Hide Port List ▼

Search

Port Name	MAC Address	Port Number	Link Status	Admin Status	Bytes TX
GigabitEthernet1/1/41	d4:c1:9e:1c:56:03	1/1/41	down	up	0 B
GigabitEthernet1/1/42	d4:c1:9e:1c:56:04	1/1/42	down	up	0 B
GigabitEthernet1/1/43	d4:c1:9e:1c:56:05	1/1/43	up	up	3.80 MB
GigabitEthernet1/1/44	d4:c1:9e:1c:56:06	1/1/44	down	up	0 B
GigabitEthernet1/1/45	d4:c1:9e:1c:56:07	1/1/45	up	up	12.83 MB
GigabitEthernet1/1/46	d4:c1:9e:1c:56:08	1/1/46	down	up	0 B
GigabitEthernet1/1/47	d4:c1:9e:1c:56:09	1/1/47	down	up	0 B
GigabitEthernet1/1/48	d4:c1:9e:1c:56:0a	1/1/48	down	up	0 B
10GigabitEthernet1/2/1	d4:c1:9e:1c:56:0c	1/2/1	down	up	0 B
10GigabitEthernet1/2/2	d4:c1:9e:1c:56:0d	1/2/2	down	up	0 B

41-50 of 56 shown

« 2 3 4 5 6 »

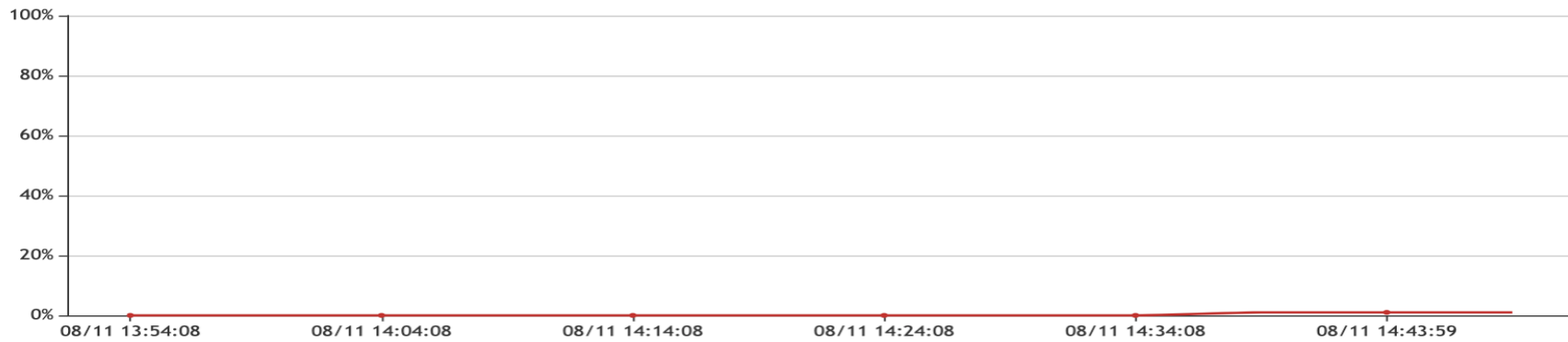
# Unleashed-Switch.



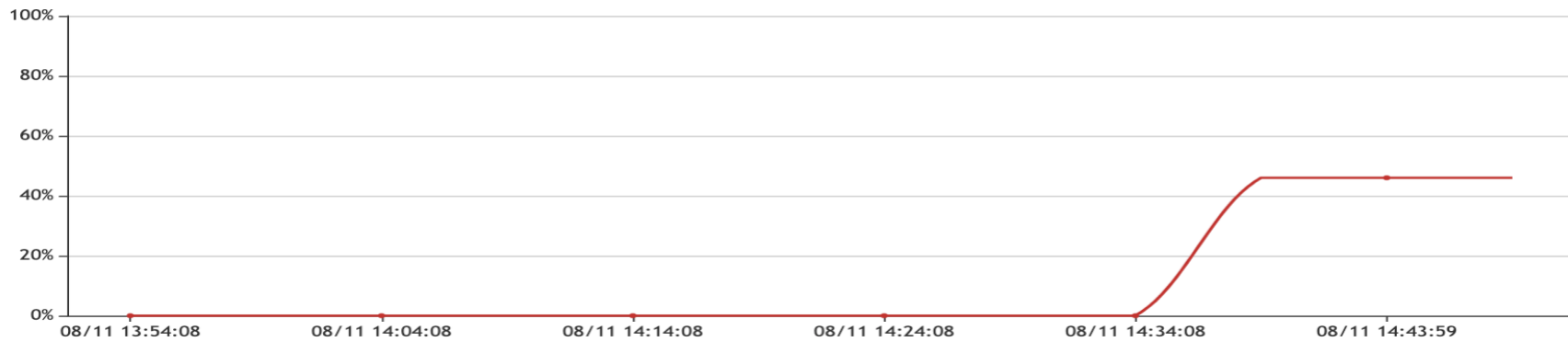
Health

Hide Health ▼

CPU Utilization: 1%



Memory Usage: 46%



# Unleashed-Switch.

## Switch Status (ICX7150-48ZP)

Power Supply  
(slots)

1  
up

Temperature  
(sensor)

1  
97 °F  
36 °C

Fan  
(slots)

1  
down

2  
up



## Events & Alarms

Hide Events & Alarms ▼

Events

Alarms

Search



Date/Time ▼	Severity	Activities
2020/08/11 14:38:32	High	ICX [d4:c1:9e:1c:55:db] joins.

1-1 of 1 shown

« 1 »

# Unleashed-Upgrade



請選擇升級方式:

在線升級 (從Ruckus網絡服務器下載升級文件)

本地升級 (從本機上傳升級文件)

請選擇文件並升級

(壹次僅能升級單個AP型號。警告: 關閉此頁面將會重置本地升級流程)

Model R510 (2 APs)  
文件名: R510\_104.0.0.0.1347.bl7 (19406844 位元組), 版本號: 104.0.0.0.1347

**Preload Image**

預加載升級檔僅當AP的版本不匹配的時候生效。當AP連接成功，下麵的陸級按鈕可以用來陸級。  
提示：只有同伴版本的升級檔才能導入。

角色	名字	MAC	型號	當前狀態	執行
Master	AP101-1	ec:58:ea:08:4b:80	R510	載入中 6%	
Member	AP101-2	54:ec:2f:15:e8:00	R510	成功 100%	

重啟 取消

# Unleashed-UMM

系統

服務

管理

- 首選項
- 備份和恢復
- 升級
- 診斷
- 證書
- 網絡連通性
- 網絡管理**
- 手機應用

SNMP 代理    SNMPv3 代理    SNMP Trap    **Unleashed多站點管理器**    通知警報

Unleashed多站點管理器

輸入 Unleashed 多站點管理器的服務器URL，並設置 Unleashed 向 Unleashed 多站點管理器發送狀態更新的時間間隔。Unleashed 200.9.10.4.202 只能與 UMM 2.4 或更高版本配合使用。

**Unleashed多站點管理器**     啓用Unleashed多站點管理器管理

URL\*    https://  /intune/server

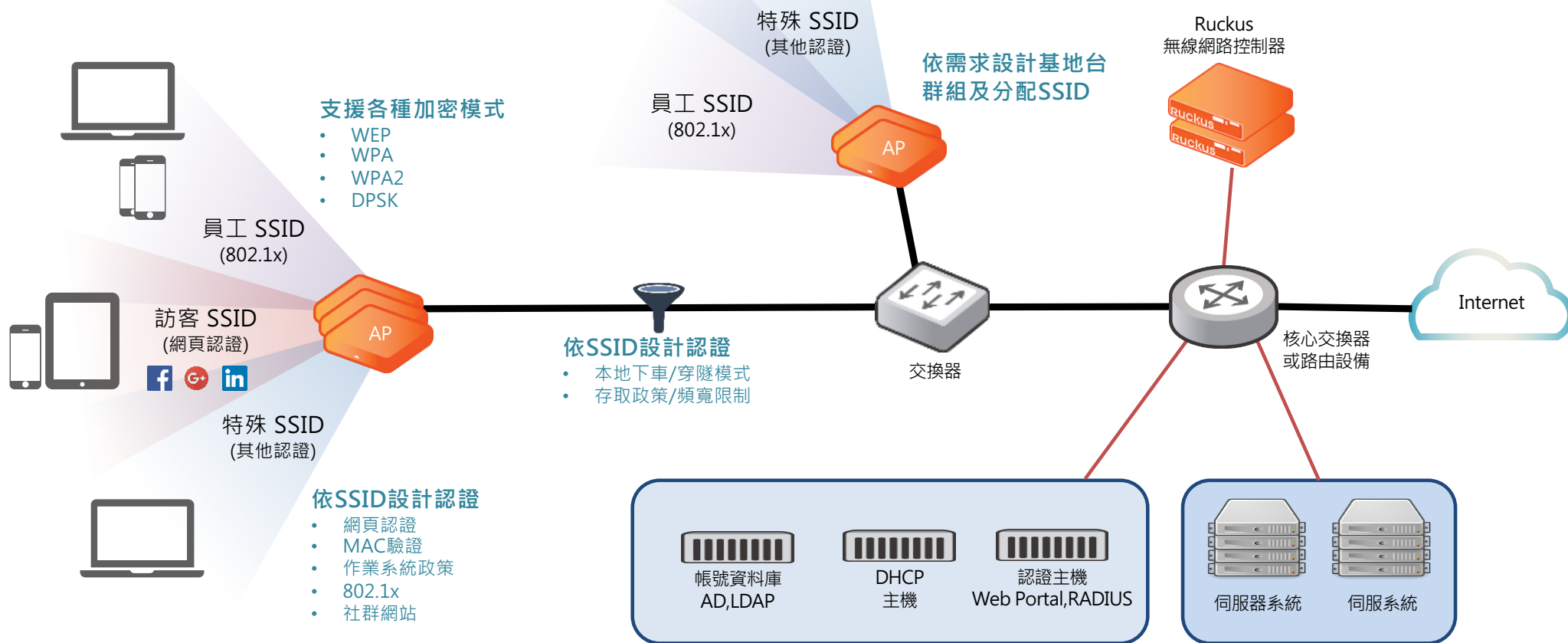
時間間隔\*     (分鐘)

應用



# ZoneDirector

# 多樣化認證及存取彈性，適用各種連線情境



# 初始設定-如何恢復原廠預設值

- 在實體介面  
F/D戳孔5~10秒左右(會聽到一聲" B" )



\*Ruckus ZoneDirector 控制器預設IP:192.168.0.2

# ZoneDirector Version



ZoneDirector 1200


[Documents](#)
[Downloads](#)
[Security Bulletins](#)
[KB Articles](#)
[Forum Topics](#)
[NEW Advanced Search](#)

h:  Show

Release Version	File	Date
ZoneDirector 10.4.1.0.226 GA SNMP MIBs (ZIP)	ZIP	
ZD1200 10.4.1.0.226 GA Software Release	IMG	
ZoneDirector 9.10.2.0.125 (MR2 Refresh9) SNMP MIBs (ZIP)	ZIP	
ZD1200 9.10.2.0.125 (MR2 Refresh9) Software Release	IMG	
ZoneDirector 10.0.1.0.123 (MR1 Refresh9) SNMP MIBs (ZIP)	ZIP	2020-09-01
ZD1200 10.0.1.0.133 (MR1 Refresh9) Software Release	IMG	2020-09-01
ZoneDirector 10.4.1.0.214 GA SNMP MIBs (ZIP)	ZIP	2020-08-18
ZD1200 10.4.1.0.214 GA Software Release	IMG	2020-08-18
ZD1200 10.4.0.0.98 (GA Refresh2) Software Release	IMG	2020-05-26
ZoneDirector 10.4.0.0.98 (GA Refresh2) SNMP MIBs (ZIP)	ZIP	2020-05-26

- ✓ All Versions
- No Version #
- 10.4
- 10.3
- 10.2
- 10.1
- 10.0
- 9.13
- 9.12
- 9.10
- 9.9
- 3.0

# 初始化



ZoneDirector ZD1200

## Setup Wizard-ZoneDirector ZD1200

Version:10.0.0.0 build 1424

- Language**
- General
- IP setting
- Wireless LANs
- Administrator
- Confirmation
- Service Terms
- Finish


### Language

Welcome to the Ruckus Wireless ZoneDirector Setup Wizard. Use this wizard to prepare ZoneDirector to run your wireless network. To start, select the display language that you want to use on the Web interface.

**Language** English

< Back **Next >**

# 初始化.

**RUCKUS™**  
ZoneDirector ZD1200

Setup Wizard-ZoneDirector ZD1200 Version:10.0.0.0 build 1424

Language

**General**

IP setting

Wireless LANs

Administrator

Confirmation

Service Terms

Finish

## General

Enter a system name for ZoneDirector. The name should be between 1 and 32 characters--numbers and letters--but not including spaces.

**System Name \***

**Country Code**


ZoneDirector provides mesh capability. Each mesh-enabled ZoneDirector requires a unique name (SSID) for the mesh WLAN for the backbone traffic.

Enable Mesh

< Back

**Next >**

# 初始化.

**ruckus™**  
ZoneDirector ZD1200

Setup Wizard-ZoneDirector ZD1200 Version:10.0.0.0 build 1424

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General

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## IP setting

Select the network addressing mode—"Manual" or "DHCP". If you select "DHCP", no further configuration is needed. If you select "Manual", enter the relevant IP addressing information. (Fields marked with an asterisk (\*) are required.)

IPv4  IPv6  IPv4 and IPv6

Manual  DHCP

**IP Address \***

**Netmask \***

**Gateway \***


**Primary DNS Server**

**Secondary DNS Server**

< Back

**Next >**

# 初始化.

**Ruckus™**  
ZoneDirector ZD1200

Setup Wizard-ZoneDirector ZD1200 Version:10.0.0.0 build 1424

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Finish

## Wireless LANs


If you make no changes to the default settings, a default WLAN "Wireless 1" with Open authentication is created. You can change it to a secure WLAN by choosing WPA\_PSK authentication and providing a passphrase. Optionally, a "Guest" WLAN can be created for temporary guest access. (More WLANs can be added later, for restricted use.)

Wireless 1-- Create your first Wireless LAN  
**Name (ESSID) \***   
**Authentication**  Open  WPA2\_PSK  
**WPA Passphrase \***   
 Guest WLAN-- Temporary access for visitors.

< Back

**Next >**

# 初始化.

**RUCKUS™**  
ZoneDirector ZD1200

Setup Wizard-ZoneDirector ZD1200 Version:10.0.0.0 build 1424

- Language
- General
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- Administrator**
- Confirmation
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- Finish

## Administrator

Enter an "Admin" user name and password that permits administrative access to the Web interface. (Use this information to log into the Web interface after this setup is complete, to further configure your new wireless network.)

**Admin Name \***

**Password \***


**Confirm Password \***

Use these features (optional) to create a single network user account at this time. (Or, if you prefer, use the Web interface to create user accounts at a later time.)

Create a user account

< Back **Next >**

# 初始化.

**RUCKUS™**  
ZoneDirector ZD1200

**Setup Wizard-ZoneDirector ZD1200** Version:10.0.0.0 build 1424

Language	
General	
IP setting	
Wireless LANs	
Administrator	
<b>Confirmation</b>	<h2>Confirmation</h2> <p>Please review the following settings. If changes need to be made, click Back to edit your settings. If the settings are ready for use, click Finish.</p> <hr/> <p><b>System Name</b> ruckus</p> <p><b>IP setting</b> 192.168.100.102</p> <p><b>Wireless LANs</b> Wireless 1, <b>Ruckus-JimLin</b>, will be created (Zero-IT Activation enabled)</p> <p><b>Mesh</b> Mesh capability is disabled</p> <p><b>Administrator</b> Account <b>admin</b> will be created</p> <p><b>System Time</b> System time will be automatically set. (Your current PC time is 2017/11/29 上午11:31:11)</p> <p>* After completing the setup wizard, please check the <a href="#">Ruckus Wireless Support Web site</a> for the latest software updates.</p>
Service Terms	
Finish	

< Back **Next >**

# 初始化.



## Setup Wizard-ZoneDirector ZD1200

Version:10.0.0.0 build 1424

ZoneDirector ZD1200

Language

General

IP setting

Wireless LANs

Administrator

Confirmation

**Service Terms**

Finish

### Service Terms

The ZoneDirector will periodically connect to Ruckus and Ruckus will collect the ZoneDirector serial number, software version and build number. Ruckus will transmit a file back to the ZoneDirector and this will be used to display the current status of the ZoneDirector Support Contract. Please be advised that this information may be transferred and stored outside of your country of residence where data protection standards may be different.

Accept terms

< Back

**Finish**

# 初始化.



## Setup Wizard-ZoneDirector ZD1200

Version:10.0.0.0 build 1424

ZoneDirector ZD1200

Language

General

IP setting

Wireless LANs

Administrator

Confirmation

Service Terms

**Finish**

### Finish

Your Ruckus Wireless ZoneDirector is now active. [ALERT] If you changed the IP address on your administrative PC for this setup procedure, reset the IP address before reconnecting your PC to the network.

Click this link to reconnect to your ZoneDirector at <https://192.168.100.102/>

# 初始化.

COMMSCOPE®  
RUCKUS®

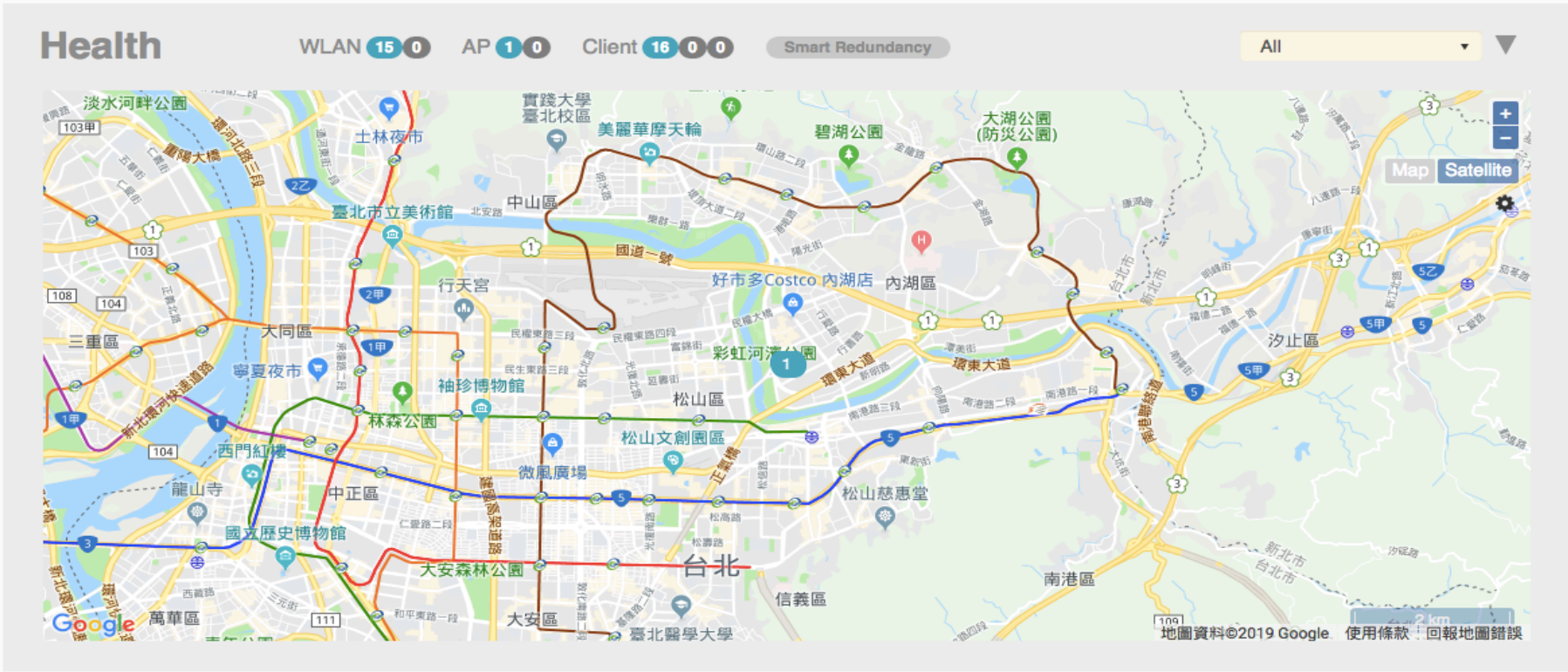


**ZoneDirector**

System Name: **ruckus**

**Login**

- Dashboard
- Access Points
- Wireless LANs
- Clients
- Troubleshooting
- Services & Profiles
- System
- Administer
- System Info
  - Name: Ruckus-ZD1205
  - Uptime: 182d 3h 16m
  - Version: 10.1.1.0 build 42



# Traffic Analysis

Last 24 hours TX+RX AP Groups

## Traffic Trend

Bytes



## Client Trend

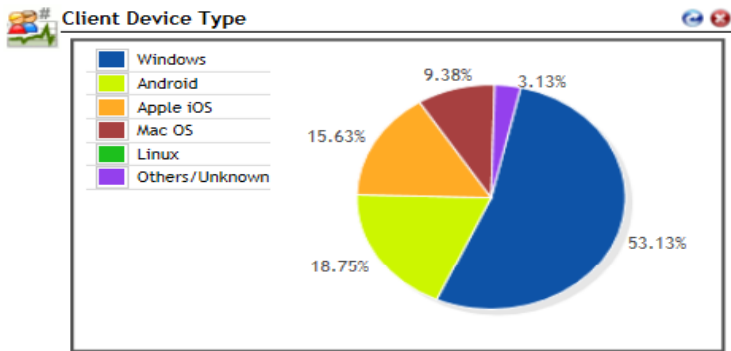
Client



儀表 監視 設定 管理

### 系統狀態一覽

系統名稱	JJNET-ruckus-1106
IP Address	192.168.2.10
MAC Address	C4:10:8A:1D:67:14
Up Time	36d 2h 39m
型號	ZD1106
已授權的AP數	6
序號	471123000271
版本	9.7.0.0 build 220



### 設備裝置一覽

接入點數	5
授權客戶端設備數	31
客戶端設備總數	32
未授權設備數	16

### 使用量一覽

	1 hr	24 hr
最大並髮用戶數	36	52
網路流量	404M	12G
平均訊號強度 (%)	87%	89%
未授權設備數	16	43

### 最近的使用者事件

日期/時間	程度	用戶	活動
2014/02/19 15:42:42	低	brian.chen	AP[RuckusAP-7025-3] radio [11g/n] detects User[brian.chen] in WLAN[JJNET] roams from AP[RuckusAP-7343]
2014/02/19 15:42:42	低	brian.chen	AP[RuckusAP-7343] radio [11g/n] detects User[brian.chen] in WLAN[JJNET] roams out to AP[RuckusAP-7025-3]
2014/02/19 15:41:42	低		User[cc:08:e0:b7:e8:58] joins WLAN[JJNET_Guest] from AP[RuckusAP-7343]
2014/02/19 15:41:40	低		User[cc:08:e0:b7:e8:58] disassociated from WLAN[JJNET_Guest] at AP[RuckusAP-7025-3] due to timeout durir
2014/02/19 15:41:40	低	brian.chen	AP[RuckusAP-7343] radio [11g/n] detects User[brian.chen] in WLAN[JJNET] roams from AP[RuckusAP-7025-3]

### 最近的系統事件

日期/時間	程度	活動
2014/02/19 15:40:11	高	A new Rogue[6c:f3:7f:a0:b1:10] with SSID[TPE-Free Bus] is detected
2014/02/19 13:41:50	高	A new Rogue[60:a4:4c:81:73:a6] with SSID[0xe68891e69c89e7b6b2e8b7afe4b...] is detected
2014/02/19 13:20:51	高	A new Rogue[1a:5b:0e:38:83:a2] with SSID[fortinet.mesh.root] is detected
2014/02/19 13:14:51	高	A new Rogue[84:7a:88:70:5a:93] with SSID[HTC Portable Hotspot FAF5] is detected
2014/02/19 13:04:49	高	A new Rogue[24:de:c6:8a:65:40] with SSID[TPE-Free Bus] is detected

### 最常用的AP

MAC Address	IP Address	備註	型號	使用者
c4:01:7c:08:fe:90	192.168.2.1	辦公區	zf7343	26
c0:8a:de:29:82:50	192.168.31.12	新竹Office	zf7321	3
c0:c5:20:25:c0:f0	192.168.2.4	大會議室	zf7025	3
c0:c5:20:25:b7:70	192.168.2.2	中會議室	zf7025	0
c4:01:7c:2c:34:40	192.168.2.5	櫃台上方吸菸區	zf7343	0

### 使用中的 Access Points

MAC Address	Device Name	備註	地點	型號	狀態	Mesh Mode	IP Address	External IP:Port	VLAN
c0:c5:20:25:c0:f0	RuckusAP-7025-3	大會議室	大會議室	zf7025	已連線	Disabled	192.168.2.4	192.168.2.4:12223	2
c0:8a:de:29:82:50	RuckusAP	新竹Office	新竹分公司	zf7321	已連線 (Root AP)	Auto	192.168.31.12	192.168.31.12:12223	31
c4:01:7c:08:fe:90	RuckusAP-7343	辦公區	Office	zf7343	已連線	Disabled	192.168.2.1	192.168.2.1:12223	2
c0:c5:20:25:b7:70	RuckusAP-7025-1	中會議室	中會議室	zf7025	已連線	Disabled	192.168.2.2	192.168.2.2:12223	2
c4:01:7c:2c:34:40	7343-2	櫃台上方吸菸區	總機上方吸菸區	zf7343	已連線	Disabled	192.168.2.5	192.168.2.5:12223	2

搜尋   Include all terms  Include any of these terms

### 使用中的 WLANs

名稱	ESSID	身份驗證	Encryption	VLAN	使用者
FOXTest_1	FOXTest_1	open	none	2	0
Backup1	Backup1	open	wep128	2	0
JJNET_D	JJNET_D	open	none	2	0
JJNET_Guest	JJNET_Guest	open	none	3	8
JJNET	JJNET	open	wpa2	2	21
Guest-HS	Guest-HS	open	wpa2	31	3
HS-JJNET	HS-JJNET	open	none	31	0

搜尋   Include all terms  Include any of these terms 1-7 (7)

新增內容

- Access Points
- 動態圖示
- WLANS
- 使用者
- 激活有線客戶端
- 自動產生的 PSK/Certs
- 核發的訪客通行証
- Rogue 裝置
- 所有的事件及活動
- 所有的 Alarms
- Mesh
- 即時監視
- System Monitoring

## Access Points

以下是正在使用中的 Access Points 及相關的事件，你可以按單一的 MAC Address 的連結來看到更詳細的資訊。

使用中的 Access Points 🔍

MAC Address	Device Name	備註	地點	型號	狀態	Mesh Mode	IP Address	External IP:Port	VLAN	通道	使用者	Action
c4:01:7c:29:c7:d0	RuckusAP			zf7343	已連線	Disabled	192.168.1.149	192.168.1.149:12223	1	Auto (11g/n-20)	0	

搜尋   Include all terms  Include any of these terms Edit Columns 1-1 (1)

目前管理的 AP 群組 🔍

Member	Device Name/備註	APs	使用者	狀態	Action
System Default	System default group for Access Points	1	0		

搜尋   Include all terms  Include any of these terms 1/1 1/1 1-2 (2)

事件/活動 🔍

日期/時間	程度	用戶	活動
2014/07/01 14:23:10	低		AP[c4:01:7c:29:c7:d0] warm boot successfully,last reboot reason [application reboot].
2014/07/01 14:22:00	低		AP[c4:01:7c:29:c7:d0] warm boot successfully,last reboot reason [application reboot].
2014/07/01 14:22:00	中		AP[c4:01:7c:29:c7:d0] reset due to IP address change
2014/07/01 14:22:00	低		AP[c4:01:7c:29:c7:d0] reset due to country code change
2014/07/01 14:23:09	中		AP[c4:01:7c:29:c7:d0] joins with uptime [46] s and last disconnected reason [AP Restart : application reboot]
2014/07/01 14:21:58	中		AP[c4:01:7c:29:c7:d0] joins with uptime [169] s and last disconnected reason [Update Backup Image]
2014/07/01 14:17:29	中		AP[c4:01:7c:29:c7:d0] joins with different firmware/custom file version and is being upgraded.
2014/07/01 14:20:08	中		AP[c4:01:7c:29:c7:d0] joins with different firmware/custom file version and is being upgraded.
2014/07/01 14:23:10	低		AP[c4:01:7c:29:c7:d0] is online.
2014/07/01 14:22:00	低		AP[c4:01:7c:29:c7:d0] is online.
2014/07/01 14:18:47	低		AP[c4:01:7c:29:c7:d0] image has been upgraded from [9.1.2.0.8] to [9.7.1.0.30]
2014/07/01 14:21:30	低		AP[c4:01:7c:29:c7:d0] backup image has been upgraded from [9.1.2.0.8] to [9.7.1.0.30]
2014/07/01 14:17:24	低		A new AP[c4:01:7c:29:c7:d0] requests to join and is automatically approved

搜尋   Include all terms  Include any of these terms 1-13 (13)

# ZoneDirector-System.

- 儀表板
- 接入點
- 無線區域網路
- 客戶 ▶
- 故障排除 ▶
- 服務與配置 ▶
- 系統 ▼
  - 系統設定
  - 系統監控
  - 所有的事件及活動
  - 所有的警報
  - 警報通知設定

## 系統設定

### 身分

系統名稱\*

ruckus

應用

### 管理 IP

如果 ZoneDirector 選擇IPv6網路模式，它將支援IPv6網路模式。

支持IPv6

如果為 ZoneDirector 指定了靜態網路尋址，請點擊「手動」並設置正確的條目。如果單擊「DHCP」，則不需要任何「手動」條目。

### IPv4 配置

手動  DHCP

IP 地址\*

192.168.1.101

子網掩碼\*

255.255.255.0

Gateway\*

192.168.1.1

主要 DNS

168.95.1.1

次要 DNS

8.8.8.8

Access VLAN\*

1

應用

# ZoneDirector-System.

## 管理介面

啟動 IPv4 管理介面

IP 地址\*

子網掩碼\*

默認網閘是連接到這個介面

Access VLAN\*

應用

## Smart Redundancy

## HA功能

啟動 Smart Redundancy 能確保當 ZoneDirector 發生錯誤或者掉電時，網路運營不間斷。如果活躍 ZoneDirector 失去連接，則備用 ZoneDirector 將自動接管。

啟動 Smart Redundancy

本地設備 IP 地址

192.168.1.101

對端設備 IP 地址\*

共用密碼\*

管理 IP 地址

已停用



指另外一台 ZoneDirector

(相應配置在 [設備 IP 設置]->[管理介面])

應用

# ZoneDirector-System.

## 系統時間

按「更新」來檢視現在的系統時間或按「將系統時間與你的 PC 同步」來設定系統時間

現在的系統時間是 10/6/2020 17:32:48 您的瀏覽器當前時間為 10/7/2020 00:32:48

使用 NTP 伺服器自動校正ZoneDirector時間

NTP 伺服器\*

系統默認  用戶自定義

請選擇當前時區：

每天自動校準時鐘

## 國家/地區代碼

不同的國家/地區對無線電頻道的使用有不同的法規。若要確保 ZoneDirector 使用已授權的無線電頻道，請旋轉您所在位置對應的國家/地區代碼。

國家/地區代碼：

頻道模式  啟動室內AP的頻道 (如果是室外的AP，允許使用室內AP的頻道)



# ZoneDirector-System.

- 儀表板
- 接入點
- 無線區域網路
- 客戶 ▶
- 故障排除 ▶
- 服務與配置 ▶
- 系統 ▼
  - 系統設定
  - 系統監控
  - 所有的事件及活動
  - 所有的警報
  - 警報通知設定
  - WLAN一般設定
  - AP一般設定

## 系統資訊

這個表格列出了系統資訊。

### 系統狀態一覽 [C](#)

系統名稱	ruckus
IP 地址	192.168.1.101
MAC 地址	60:D0:2C:38:D2:60
運行時間	2h 47m
型號	ZD1200
已授權的AP數	5
S/N	211838000429
版本	10.4.1.0 build 214

### 系統乙太網 [C](#)

埠	MAC 地址	介面	連接狀態	速率	輸入封包	輸入位元組	輸出封包	輸出位元組
0	60:d0:2c:38:d2:60	eth0	up	1000Mbps	40K	5.9M	29K	22M
1	60:d0:2c:38:d2:61	eth1	up	1000Mbps	1.3K	193K	3.4K	828K

### 智能備份 [C](#) [e](#)

# ZoneDirector-AP join

儀表板

接入點

無線區域網路

客戶 ▶

故障排除 ▶

服務與配置 ▶

系統 ▶

管理 ▶

**i** 系統資訊

系統名稱: ruckus  
運行時間: 2h 5m  
版本: 10.4.1.0 build 214

## 接入點

視圖模式: 列表 組 地圖 網格



系統 1

- AG System Default 1

MAC 地址 ^	設備名稱	型號	狀態	網絡模式	IP地址
38:ff:36:28:8b:e0	RuckusAP	R500	未連線 ( 2020/10/06 18:38:47 )	Auto	172.16.16.26

列出1-1，總共1條記錄 « 1 »

接入點策略 接入點配置 接入點USB 事件/活動

### 接入點策略

批准  當發現新的接入點，自動批准它的加入請求(為了最高的安全性，在所有的接入點 都加入後，建議你將此選項取消。新的接入點將需要你的手動批准才能加入)

有限的ZoneDirector發現  只連接以下 ZoneDirector

配置主、備ZoneDirector設置到AP(可輸入IP或者功能變數名稱)

主ZoneDirector地址\*

# ZoneDirector-AP資訊

接入點

系統 1

AG System Default 1

MAC 地址	設備名稱	型號	狀態
38:ff:36:28:8b:e0	RuckusAP	R500	未連線

一般 配置 客戶 Mesh 傳感器 事件/活動

信息

設備名稱	RuckusAP
狀態	未連線 ( 2020/10/06 18:38:47 )
運行時間	0s
說明	
地點	
GPS 座標	
MAC 地址	38:ff:36:28:8b:e0
IP 地址	172.16.16.26
外部IP : 埠	172.16.16.16:12223
IPv6 地址	fc00::1
IP 類型	Static
連接模式	L3
VLAN	
客戶	
型號	R500
USB口	不存在
電源模式	不支持
S/N	391504202405
版本	10.4.1.0.214
Bonjour網關	已停用
Bonjour Fencing	已停用
執行	

# ZoneDirector-WLAN

儀表板

接入點

無線區域網路

客戶 ▶

故障排除 ▶

服務與配置 ▶

系統 ▶

管理 ▶

## 無線區域網路

視圖模式: 列表 組

+ 新增 更改 複製 刪除

搜尋

系統

- WG Default

名稱 ^	ESSID	說明	類型	身份驗證
FrogLab543-PSK	FrogLab543-PSK		默認使用情況	開放
ZD-8021x	ZD-8021x		默認使用情況	802.1x EAP
ZD-Guest	ZD-Guest		設定此 WLAN 為訪客用途	開放
ZD-PSK	ZD-PSK		默認使用情況	開放

# ZoneDirector-WLAN-PSK

## 修改 WLAN



### 一般選項

\*名稱:

\*ESSID:

說明:

### 訪客用途

- 類型:
- 默認使用情況 (適用於大多數無線網路)
  - 設定此 WLAN 為訪客用途 (系統會套用訪客設定及訪問控制。)
  - 熱點服務 (WISPr)
  - Hotspot 2.0
  - Autonomous

# ZoneDirector-WLAN-PSK.

加密選項

方法:  WPA2  WPA3  WPA2/WPA3-Mixed  OWE  WPA-Mixed  WEP-64 (40 比特)  WEP-128 (104 比特)  
 None

演算法:  AES  自動 (TKIP+AES)

\*密碼:

802.11w MFP:  已停用  可選擇的  必須的

# ZoneDirector-WLAN-802.1x

## 一般選項

\*名稱:

\*ESSID:

說明:

## 訪客用途

- 類型:  默認使用情況 (適用於大多數無線網路)
- 設定此 WLAN 為訪客用途 (系統會套用訪客設定及訪問控制。)
- 熱點服務 (WISPr)
- Hotspot 2.0
- Autonomous

# ZoneDirector-WLAN-802.1x.

## 認證選項

方法:  開放  802.1x EAP  MAC 地址  802.1x EAP + MAC 地址

Fast BSS Transition:  啟動 802.11r 快速漫遊 (建議啟動 802.11k 鄰居表報告。)

認證伺服器:

Zero-IT Activation <sup>TM</sup>:  啟用 Zero-IT Activation

(使用者在登入之後，將可安裝無線網路自動設定程式)

## 加密選項

方法:  WPA2  WPA3  WPA-Mixed  WEP-64 (40 比特)  WEP-128 (104 比特)  None

# ZoneDirector-WLAN-802.1x.

儀表板

接入點

無線區域網路

客戶 ▶

故障排除 ▶

服務與配置 ▼

- 應用控制
- 訪問控制
- URL 過濾
- 地圖
- 訪客設定
- 熱點服務
- 熱點 2.0 服務
- 網格
- AAA 伺服器**
- DHCP 中繼

## 身份驗證/記賬伺服器

身份驗證/記賬伺服器

### 更改

\* 名稱

種類  AD for Web Portal  LDAP  RADIUS  RADIUS計費  TACACS+  AD for 802.1x

加密方式  TLS

認證方法  PAP  CHAP

備用 RADIUS  啟動備用的 RADIUS

\* IP 地址

\* 埠

\* 共用密碼

\* 確認密碼

失效備援策略

\* 請求超時  秒

\* 最多重試  次

確定 取消

# ZoneDirector-WLAN-Guest

## 一般選項

\*名稱:

\*ESSID:

說明:

## 訪客用途

- 類型:
- 默認使用情況 (適用於大多數無線網路)
  - 設定此 WLAN 為訪客用途 (系統會套用訪客設定及訪問控制。)
  - 熱點服務 (WISPr)
  - Hotspot 2.0
  - Autonomous

訪客服務:

# ZoneDirector-WLAN-Guest.

## 認證選項

方法:  開放  802.1x EAP  MAC 地址  802.1x EAP + MAC 地址

Fast BSS Transition:  啟動 802.11r 快速漫遊 (建議啟動 802.11k 鄰居表報告。)

## 加密選項

方法:  WPA2  WPA3  WPA2/WPA3-Mixed  OWE  WPA-Mixed  WEP-64 (40 比特)  WEP-128 (104 比特)  
 None

# ZoneDirector-WLAN-GuestService

編輯(guest)



一般

名稱\*

認證功能入口  開啟認證功能入口

訪客認證  來賓及社交認證

社交認證

任何訪客

使用同意書  顯示使用同意書

網頁顯示  顯示訪客的首頁

顯示以下的網頁 URL :

來賓認證選項

訪客通行證時效  訪客通行證為在發行之後，經過指定時數就會失效

訪客通行證為在第一次登入之後，經過指定時數就會失效

確定

取消

# ZoneDirector-Client資訊

## 當前活動的客戶端

以下是所有在無線網路上的使用者，只有「已認證」的使用者能使用你的無線網路。如果你想防止某一個「未認證」的使用者再度接上，請按「加入黑名單」。你可以用「中斷連線」來強迫一個使用者重新連接上你的無線網路

要查看被加入黑名單的使用者，[請按這裏](#)

活躍客戶 非活躍客戶端 所有的事件及活動

刪除 阻止 SpeedFlex 更多

搜尋

MAC 地址 ^	操作系統類型	主機名稱	使用者/IP	使用者角色	Access Point
暫無數據。					

列出0-0，總共0條記錄 « 1 »

儀表板

接入點

無線區域網路

客戶

當前活動的客戶端

有線客戶端

自動產生的 PSK

核發的訪客通行証

應用

儀表 **監視** 設定 Administer

- Access Points
- 動態圖示
- WLANs
- 使用者**
- 自動產生的 PSK/Certs
- 核發的訪客通行証
- Rogue 裝置
- 所有的事件及活動
- 所有的 Alarms
- Mesh

## 使用者

This table lists all currently connected client devices. Only those devices with a status of "authorized" are permitted access to the network. To prevent an "unauthorized" client from attempting to connect to your network, click Block. To troubleshoot a problematic connection, click Delete. (That client can then reconnect to the WLAN.)

要查看被加入黑名單的使用者，請按這裏 **目前使用的頻道** **目前使用的協定** **使用者是否經過認可**

無線網路使用者及MAC

MAC Address	使用者/AP	Access Point	WLAN	Channel	Radio	訊號	Status	Action
00:10:77:01:00:01	jyang	00:13:92:EA:43:01	corporate	1	802.11b/g	99%	已認證	Delete Block SpeedFlex
00:10:77:01:00:02	bob	00:13:92:EA:43:01	corporate	6	802.11b/g	74%	已認證	Delete Block SpeedFlex
00:AA:D0:01:00:03	user0001	00:13:92:EA:43:01	corporate	11	802.11b/g	94%	已認證	Delete Block SpeedFlex
00:10:77:01:00:01	10.1.0.4	00:13:92:EA:43:01	guest	11	802.11b/g	32%	已認證	Delete Block SpeedFlex
00:10:77:01:00:02	10.1.0.5	00:13:92:EA:43:01	guest	11	802.11b/g	12%	已認證	Delete Block SpeedFlex
00:5E:6F:01:00:03	10.1.0.6	00:13:92:EA:43:01	guest	1	802.11b/g	99%	已認證	Delete Block SpeedFlex
00:AC:80:20:01	user0002	00:13:92:EA:43:04	corporate	48	802.11a	82%	已認證	Delete Block SpeedFlex
00:62:85:02:02:02	user0003	00:13:92:EA:43:04	corporate	36	802.11a	17%	已認證	Delete Block SpeedFlex
00:6A:B4:02:02:03	user0004	00:13:92:EA:43:04	corporate	64	802.11a	92%	已認證	Delete Block SpeedFlex
00:54:CF:02:02:04	user0005	00:13:92:EA:43:04	corporate	56	802.11a	99%	已認證	Delete Block SpeedFlex
00:14:E3:02:02:05	user0006	00:13:92:EA:43:04	corporate	56	802.11a	42%	已認證	Delete Block SpeedFlex
00:8F:3D:02:02:06	user0007	00:13:92:EA:43:04	corporate	52	802.11a	57%	已認證	Delete Block SpeedFlex
00:33:05:02:02:07	user0008	00:13:92:EA:43:04	corporate	44	802.11a	67%	已認證	Delete Block SpeedFlex
00:48:54:02:00:01	user0009	00:13:92:EA:43:04	corporate	11	802.11b/g	2.5%	已認證	Delete Block SpeedFlex
00:AF:C6:02:00:01	10.1.0.15	00:13:92:EA:43:04	guest	1	802.11b/g	40%	已認證	Delete Block SpeedFlex

此按鍵可使目前的使用者斷線

可將目前使用者加入黑名單

目前連線使用者的訊號強度

使用測速程式了解目前的連線傳輸的最大頻寬

顯示更多 1-15 (37)

事件/活動

日期/時間	程度	使用者	活動
2005/12/20 01:44:08	中	jyang	User[jyang@00:10:77:01:00:01] of WLAN[corporate] encountered low signal
2005/12/20 01:44:07	中	jyang	AP[00:13:92:EA:43:04] radio ~radiotot~ detects User[jyang@00:10:77:01:00:01] in WLAN[corporate] roams from AP[00:13:92:EA:43:01]



儀表 **監視** 設定 管理

Access Points

動態圖示

WLANs

使用者

自動產生的 PSK/Certs

**核發的訪客通行証**

Rogue 裝置

所有的事件及活動

所有的 Alarms

Mesh

## 核發的訪客通行証

以下是所有核發的訪客通行証。過期的訪客通行証將會被自動刪除，你也可以手動刪除已核發的訪客通行証。

<input type="checkbox"/>	訪客名稱	說明	有效期限	核發者
<input type="checkbox"/>	harmon	test	2028/04/25 23:26:05	admin

搜尋  刪除 1-1 (1)

經過訪客認證的使  
用的將出現在此頁

# ZoneDirector-備份/還原

ZoneDirector ZD1200

- 儀表板
- 接入點
- 無線區域網路
- 客戶 ▶
- 故障排除 ▶
- 服務與配置 ▶
- 系統 ▶
- 管理 ▼
  - 偏好設定
  - 即時監視
  - 備份

## 備份 / 還原

### 備份系統設定

按下「備份」可以將你的系統設定備份起來，讓你可以很容易將系統還原至所設定的狀態

備份

### 恢復系統設定

如果你需要恢復系統設定，請按下「瀏覽」，選擇一個適合的備份檔

選擇檔案 未選擇任何檔案

### 還原系統至出廠狀態

按下「還原系統至出廠狀態」可以將你所有的設定清除，你將必須重新設定

還原系統至出廠狀態

# ZoneDirector-軟體升級

儀表板

接入點

無線區域網路

客戶

故障排除

服務與配置

系統

管理

偏好設定

即時監視

備份

重新啟動

系統軟體升級

許可證 & 支持

證書

## 系統軟體升級

### 系統軟體資訊

現在軟體版本為 10.4.1.0 build 214. 要檢視此版本所能管理的 Access Points 資訊，[請按這裏](#)

### 系統軟體更新

注意：在更新前請先備份你的系統。要更新 ZoneDirector 及所有 Access Points 的軟體，請按下「瀏覽」，選擇一個軟體更新檔

未選擇任何檔案

### AP Patch Firmware

**重要：**在AP陞級之前，ZoneDirector將會提示備份一下ZoneDirector配真.在備份至本地後，可以選擇升級檔，開始陞級.當“瀏覽”變成了“陞級”，點擊該按鈕啟動陞級過程.之後ZoneDirector將會自動重啟，同時網絡將在陞級完全恢復.

未選擇任何檔案

該區域顯示最近上傳的AP補丁固件記錄

### AP 補丁

日期/時間	版本	狀態	AP 版本
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搜尋   包含所有條件  包含任一條件

0-0 (0)

### AP安全模式升級

當選擇AP安全模式升級後，AP將使用H3C FOS(編號碼11.1.1.0)方式進行升級

# ZoneDirector-軟體升級.

## 系統軟體資訊

現在軟體版本為 10.4.1.0 build 214. 要檢視此版本所能管理的 Access Points 資訊，請按這裏

AP 版本	AP 軟體版本	Patch Firmware
c110	10.4.1.0.214	
e510	10.4.1.0.214	
h320	10.4.1.0.214	
h510	10.4.1.0.214	
r310	10.4.1.0.214	
r320	10.4.1.0.214	
r500	10.4.1.0.214	
r510	10.4.1.0.214	
r550	10.4.1.0.214	
r600	10.4.1.0.214	
r610	10.4.1.0.214	
r650	10.4.1.0.214	
r710	10.4.1.0.214	
r720	10.4.1.0.214	
r730	10.4.1.0.214	

# ZoneDirector-Support

RUCKUS®

ZoneDirector ZD1200

售後支援有效期僅剩[82]天

2020/10/07 00:47:42

admin

儀表板

接入點

無線區域網路

客戶

故障排除

服務與配置

系統

管理

偏好設定

即時監視

備份

重新啟動

系統軟體升級

許可證 & 支持

## 許可證 & 支持

AP許可證 URL過濾許可證 客戶支援

### 售後支援

- ZoneDirector產品的銷售有一個終身有限的硬件保修加上90天的支持，嚴格提供訪問軟件升級。
  - 請聯繫您的經銷商購買支持協議，以繼續訪問SW升級和訪問Ruckus Wireless技術援助中心。
  - 下面的“更新支持權限”按鈕將更新支持結束日期，以匹配您已經購買的任何支持的結束日期。
- 售後支援有效期僅剩82天，如需購買新的支援，請聯繫 [Ruckus Wireless Support](#)。

更新支持權限 通過文件更新支持權限 顯示詳細信息

序列號	已購買的售後支援	開始日期	結束日期	AP數量	狀態
211838000429	904	2020/09/28 00:00:00	2020/12/27 23:59:00	licensed	使用中的

.spt file

### 支持聯繫方式

#### 線上客戶支援

註冊賬號 [Ruckus客戶支援主頁](#) [客戶支援文檔](#) [客戶支援論壇](#) [創建新的客戶案例](#)

#### 保固資訊

[產品註冊](#)

#### 公司

[Ruckus Wireless, Inc](#)



# ZoneDirector-Support.

>>> support.ruckuswireless.com

Due to the COVID-19 pandemic, most Ruckus Networks Support Engineers are working remotely. If you experience difficulties with Ruckus Networks Support via telephone, please use our Live Chat option as an alternative channel to open a case.

🔔 Announcements

📈 Upgrade Guides

📁 License Management

✓ Warranty & RMA

🔍 KB & Forums

⚙️ Tools

🔌 Asset Management

Register Warranty

Warranty Checker

"Support Service" Missing or Expiring

RMA Return Instructions

Activate

Warrant

Register

Downlo



### "Support Service" Missing or Expiring

Use this tool to download your "Support Service" file. Simply save the file to your desktop and then you can manually upload to your ZoneDirector.

### Instructions

1. Enter your ZoneDirector serial number below.
2. Click "Submit" button.
3. Save the file.
4. Upload the file to your ZoneDirector (GUI "Administer" & "Support")

🔍 Hide Instructions

Always Hide Instructions

🔍 Serial Number

Submit

