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Eweb Configuration Sample For FAT AP

RGOS Version 11.1(5) B9P5



Contents

Preface

Initialization

Login Web Management Page Convert AP from Fit to Fat Mode

- **G** Scenario 1 : Quick Configuration
- □ Scenario 2 :Normal Configuration

□ Advance configuration

Modify SSID name and Password Channel , power and STA limitation General Wlan Rate Limit AP_SSID-based Isolation Static Blacklist & Whitelist Built-in Web Authentication Custom Landing Page Template





D Daily maintainance

Modify Super Administrator Password Create new administrator Configure Log Server Upgrade System from 11.x to 11.x Export /Import Current Config Restore Factory Setting

□ Appendix

Upgrade system from 10.4 to 11.x



Preface

Audience

Ruijie business partners and customers who are responsible for configuring and maintaining Ruijie wireless devices.

Revision Record

Version	Release Date	Contents	Author
V1.0	2015.8	First Release	Scott
V1.1	2016.8	Add Custom Landing Page Template	Oscar

Note :

For more detail configuration , see configuration guide for each product . you can download configuration guide at <u>http://www.ruijienetworks.com</u>

For more technical enquiry , you can visit Ruijie Service portal at <u>http://case.ruijienetworks.com</u> . You need to sign up before submit a case.



Preface

- This slide is going to guide you how to configure Ruijie AP in Fat mode with web management tool----- Eweb
- In 1st part, you will study how to initialize AP including login Web UI and convert to Fat AP
- In 2nd part, there are 2 most practical configuration scenarios.
- In 3rd part, there are some advanced configurations.
- In 4th part, daily maintenance
- The brief workflow is as below :





Initialization : Connect and power on AP



- As shown in above diagram , you need one POE switch to power AP on .(POE adapter is also ok)
- Put both laptop and AP in the same vlan .By default , the IP address of AP is 192.168.110.1/24 , so assign IP address 192.168.110.2/24 to laptop.
- Now , laptop should be able to communicate with AP. You can verify it by ping.



Initialization : Login Web Management Page

□ Open browser and visit <u>http://192.168.110.1</u> You will see below login page The default identity is that **Username: admin & Password: admin**



Initialization : Convert AP from fit mode to fat mode

□ Go to "System" -> "System Mode" in the left ,select "Fat AP Mode" in the right AP will reload and switch to Fat mode.

Note : By default , AP works in Fit Mode.



Scenario 1 : Quick Configuration

- If it is the first time you configure Ruijie AP, your requirement is just one "plug and play" AP to broadcast only one SSID, it is recommend to use "Quick configuration".
- Quick configuration allows you to configure a WLAN by simply specifying the "SSID name" and "password". Then ,you can plug AP in your network and it will extend wired to wireless.



Scenario 1(1):Modify vlan and management IP

• Eweb will prompt the "Quick configuration" for the first time you login.

- □ Also ,you can open "Quick configuration" in the top right of Eweb.
- □ First choose access mode
- □ Assign one management IP address to Fat AP.

RL	ijie ap	CWEB Model: AP740-1 Detail	[→ Logou
Monitor	Settings		
6	Upgrade	Quick Settings—External Network Settings ×	
Network	Restart		
Ū	Permissions	AP Working Mode O Wireless Routing Mode	
Security	Logging	Note: In AP access mode, an AP is connected to a router or switch that accesses the network to provide WFi in scenarios such as in offices or botels.	
∠්ම Advanced	Detection Tools	Vax 1 1 Keen the vian setting	
©	Web Cli		
System I	System Mode		ç
		2 Assign management IP address	
		Mask: 255.255.255.0	
		Default Gateway: Optional	
		Note: This function is designed for ease of use based on user scenario. It is recommended to configure the function via Web instead of CLL Appreate port configuration is not supported.	
		3. Click Next	



Scenario 1(1):Set SSID name and password

□ Specify SSID name and set password .

□ So far "Quick configuration" has finished !

	ijie ap	AP @WEB Model: AP740-1 Detail Cuick Settings @ Online Service 🖏 Simple		🔀 Quick Settings 🖄 Online Service 🖓 Simplified Chinese 🕞 Logout
Monitor	Settings			
<i>f</i> D	Upgrade		Quick Settings—WiFi	×
Vetwork	Restart			1 Specify SSID name and password
1	Permissions		SSID: Eweb_69571 *	
Security	Logging		WiFi Password: ewebwifi 🖂 S	how Password
∠⊗ Advanced	Detection Tools			
ල	Web Cli			
System	System Mode			
				2.Click "Finish"
				Back Finish



Scenario 1(2) :Modify management IP

- □ Now we choose routing mode
- □ Assign one management IP address to Fat AP.
- And we do not choose NAT

Ruijie AP		WEB Model: AP740-1 Detail	🔂 Quick Settings 🙎 Online Service 🖓 Simplified Chinese 🕞 Logout
Monitor	WiFi/WLAN		
	Channel		Quick Settings—External Network Settings X
8 Network	External Network		
(!)	WDS		AP Working Mode: AP Access Mode Wireless Routing Mode
Security	Internet Auth		Port Gi0/1 (If you want to change the port please gable proceed to envite b
2			device configuration.)
Advanced			Internet Connection Type: Static IP (Dedicated IP)
<0) System			^{IP: 192.168.2.135} * 2.Assign management IP address
			IP Mask: 255.255.255.0
			Default Gateway: 102 168 2 254
			addresses. addresses to external addresses to external addresses to external addresses
			Note: This function is designed for ease of user scenario it is recommended to configure the
			4. Click "Next" Next



Scenario 1(2) :Set SSID name and password

□ Specify SSID name and set password .

After these configuration we need to write an route point to users in the Layer3 device.
 So far "Quick configuration" has finished !

RL	ijie ap	CWEB Model: AP740-I Detail
	Dashboard	
Ø	User Info	
Network		\equiv Quick Settings—WiFi 1 Specify SSID name and password
() Security		
Q		SSID: levyrouter *
Advanced		WiFi Password: 12345678 Show Password
ැබු		DHCP: Enable (IP addresses are allocated by AP)
System		Vian ID: 10 2.Create vlan for users
		IP Range: 10.10.10 1 to 254
		DHCP Gateway: 10.10.10.254
		Preferred DNS Server: 114.114.114 Optional
		Secondary DNS Server: Optional Optional Click "Finish"
		Back Finish



Scenario 1(3) :Modify management IP

- □ Now we choose routing mode
- Assign one management IP address to Fat AP.
- □ And we choose NAT

RL	ijie ap	CWEB Model: AP740-1 Detail	Quick Settin
	WiFi/WLAN		
~	Channel		
Ø Network	External Network		
(!)	WDS		
Security	Internet Auth	AP Working Mode: AP Access Mode Wireless Routing Mode	
2® Advanced		1. Choose the port which is connected to switch	
ැිූි System		Internet Connection Type: Static IP (Dedicated IP)	
_,		2.Assign management IP address	
		IP Mask: 255.255.0	
		Default Gateway: 192.168.2.254 *	
		3. Choose nat	
		Note: This function is designed for ease of use based on user scenario. It is recommended to configure the	
		4. Click "Next" Next	



Scenario 1(3) :Set SSID name and password

Specify SSID name and set password .So far "Quick configuration" has finished !

RL	IJIE AP	E Model: AP740-I Detail
Monitor	Dashboard User Info	
Network		
U./ Security		SSID: levyrouter *
2 Advanced		WiFi Password: 12345678 Show Password
ŝ		DHCP: Enable (IP addresses are allocated by AP)
System		Vian ID: 10 2.Create vlan for users
		IP Range: 10.10.10 1 to 254
		DHCP Gateway: 10.10.10.254
		Preferred DNS Server: 114.114.114 Optional
		Secondary DNS Server. Optional 3.Click "Finish"
		Back Finish



Scenario 1 : Verification

Connect this FAT AP to your network , and it starts to broadcast SSID "Eweb_226A1" . Connect to this SSID and input password , you are able to obtain the network.







Scenario 2 : Normal Configurations

- □ Compare with "Quick configuration", if you want to configure multiple SSIDs and customize additional settings like ,vlan , DHCP etc , "Normal Configuration " is prefer.
- Following sample displays a common enterprise wired network . Now we are going to build wireless network. In design ,besides common wired network , we create two more vlans : one for AP management , the other one for wireless users .



Note :

- Set Core switch as gateway for vlan 10,20 and 110.
- Set Core switch as DHCP Server for vlan 10,20 and 110.
- You can also set Fat AP as DHCP Server for vlan 20.(optional, will cover in following content)



Scenario 2 : Configure POE Switch

- It is recommended to set the POE port on POE switch in Trunk mode and untag ap management vlan 110. Trunk port is able to forward traffic of multiple vlans so that you can configure multiple ssids and map one ssid to one vlan.
- Also, you can set POE port on POE switch in access mode, but access port is able to forward traffic of only one vlan.



Scenario 2 : Create a new WLAN

□ Log into Eweb, go to "WiFi/Wlan", click the "+" button to create a new Wlan.

Unfold "Advanced Settings", map SSID "NewWlan" to vlan 20

	IJIE AP	WEB Model: AP740-I Detail
	WiFi/WLAN	WIFI-1 × + × 1.Click "+" button
	Channel	Note: This function is designed for ease of use based on user scenario. It is recommended to configure the function via Web instead of CLL
Ø Jetwork	External Network	Note. This function is designed for ease of use based on user scenario. It is recommended to consigure the function via vveb instead of oct.
	WDS	Wlan Id: 1 * Range(1-16)
Security	Internet Auth	SSID: NewWian * 2.Fill in "SSID" and "Password"
2® Advanced		Encryption Type: WPA/WPA2-PSK
ŝ		WiFi Password: ewebwifi * Show Password
System		Advanced Settings 3. Unfold "Advanced Settings"
		Hide SSID:
		WiFi Type: 2.4G(radio1) ≥ 5G(radio2) ≥ 5G(radio3) [Is signal unstable or weak?]
		4.Click "Vlan" 2.4G(radio1) VLAN : 1 ▼ DHCP : Enabled on switches or gatewa
		5G(radio2) <u>VLAN</u> : 1 ▼ <u>DHCP</u> : Enabled on switches or gatewar
		5G(radio3) <u>VLAN</u> : 1 ▼ <u>DHCP</u> : Enabled on switches or gatewa
		How to configure VLAN and DHCP?
		Access priority 5G: OFF
		Save



Scenario 2 : Create a new VLAN

□ Map SSID "NewWlan" to vlan 20 ,so create vlan 20 first

		1.Click "Ad	d VLAN"		
	I				
Add VLA	N X Delete Selected VI	LAN			
	VLAN ID	IPv4	IPv4 Mask	IPv6 Address/Mask	Action
	1	192.168.110.1	255.255.255.0		Edit
Show No.	10 V Total Count:1			I4 First ∉ F	Pre 1 Next ▶ Last ▶ 1
		2 Fill in $\frac{1}{2}$	an ID and as	sign IP address	to $B \times I 20$
		2.1 111 111 110		sign in address	
Add V	LAN		×		
	VLAN ID: 20	× (Range: 1-4094)			
	IP: 192.168.20.2	253			
	>> Advance	a Settings			
			Save Cancel		
	7	3 Complet	od		
VLAN		3. Complet	eu		×
Add \/LAN		N			
AUU VLAI	A Delete Selected ADA	un			
	VLAN ID	IPv4	IPv4 Mask	IPv6 Address/Mask	Action
]	1	192.168.110.1	255.255.255.0		Edit
	20	192.168.20.253	255,255,255.0		Edit Delete

Id First 4 Pre 1 Next ▶ Last ▶ 1 GO



Show No.: 10 V Total Count:2

Scenario 2 : Map SSID to VLAN

□ Map both 2.4G and 5G radio to VLAN 20.

Remain DHCP settings by default if you set DHCP Server on Core switch
 Read next page if you set DHCP Server on Fat AP (Optional)

RL	ijie ap	🥙 WEB Model: AP740-1 Detail 😨 Quick Settings 🙎 Online Service 🖏 Simplified Chinese 🗗	.ogout
C Monitor	WiFi/WLAN	WiFi-1 × WiFi-2 × + v	
- Network	Channel External Network	Note: This function is designed for ease of use based on user scenario. It is recommended to configure the function via Web instead of CLI.	
1	WDS	Wian Id: 2 Range(1-16)	
Security	Internet Auth	SSID: Eweb_69572 *	
2® Advanced		Encryption Type: WPA/WPA2-PSK V	
ŝ		WiFi Password: ewebwifi * ✓ Show Password	
System		Y Advanced Settings	
		Hide SSID:	
		WiFi Type: 2.4G(radio1) 5G(radio2) 5G(radio3) [Is signal unstable or weak?]	
		2.4G(radio1) VLAN : 1(192.168.2.135) ✓ DHCP : Enabled on switches or gatew.▼ 1. Map to Vlan 20	
		5G(radio2) <u>VLAN</u> : 1(192.168.2.135) ✓ <u>DHCP</u> : Enabled on switches or gatew.▼	
		5G(radio3) <u>VLAN</u> : 1(192.168.2.135) → <u>DHCP</u> : Enabled on switches or gatew.▼ How to configure VLAN and DHCP2 →	
		Access priority 5G: OFF	
		Save 3. Click "Save"	



Scenario 2 : Set DHCP Server on Fat AP (Optional)

□ If there is no external DHCP Server , set DHCP Server on Fat AP.



Cancel

4.Click "Save"

Scenario 2 : Complete and Save configuration

- **SSID** name and password
- □ VLAN mapping and DHCP setting

RL	IJIE AP	2 WEB Model: AP740-1 Detail Quick Settings Q Online Service 🖏 Simplified Chinese 🗗 Logout
☆ Monitor	WiFi/WLAN	WiFi-1 * WiFi-2 * + v
Network	External Network	Note: This function is designed for ease of use based on user scenario. It is recommended to configure the function via Web instead of CLI.
1	WDS	Wian Id: 2 * Range(1-16)
Security	Internet Auth	ssid: Eweb_69572 * 1.Check SSID name and password
∠`⊚ Advanced		Encryption Type: WPA/WPA2-PSK ~
ැබූ System		WiFi Password: ewebwifi * Show Password
		V Advanced Settings
		WiFi Type: 2.4G(radio1) 25G(radio2) 55(radio2) 55G(radio3) [Is signal unstable or weak?]
		2.4G(radio1) <u>VLAN</u> : 1(192.168.2.135) ✓ <u>DHCP</u> : Enabled on switches or gatew.▼
		5G(radio2) <u>VLAN</u> : 1(192.168.2.135) ∨ <u>DHCP</u> : Enabled on switches or gatew.▼
		5G(radio3) <u>VLAN</u> : 1(192.168.2.135) ∨ <u>DHCP</u> : Enabled on switches or gatew.▼
		How to configure VI AN and DHCP2 ~
		Access priority 5G: OFF
		Save 3.Click "Save"



Scenario 2 : Verification

□ Follow below steps to Verify wireless function.



Networks #

Close

Advanced Configurations: Modify SSID name and Password

Go to "Wifi/WLAN" in the left, select "wlan name" in the right .
 Modify SSID name and password , then save configuration.

RL	IJIE AP	WEB Model: AP740-I Detail	C Quick Settings	2 Online Service	[®] A Simplified Chinese	➡ Logout
C Monitor	WiFi/WLAN	WiFi-1 × WiFi-2 × + v				
Network	External Network	Note: This function is designed for ease of use based on user scenario. It is recommended to configure the function via Web instead of CLI.				
1	WDS	Wian Id: 2 * Range(1-16)				
Security	Internet Auth	ssid: Eweb_69572 * Change ssid				
Advanced		Encryption Type: WPA/WPA2-PSK V				
ŝ						
System		Advanced Settings				
		Hide SSID:				
		WiFi Type: 2.4G(radio1) 5G(radio2) 5G(radio3) [Is signal unstable or weak?]				
		2.4G(radio1) VLAN : 1(192.168.2.135) ✓ DHCP : Enabled on switches or gatew.▼				
		5G(radio2) <u>VLAN</u> : 1(192.168.2.135) ✓ <u>DHCP</u> : Enabled on switches or gatew.▼				
		5G(radio3) <u>VLAN</u> : 1(192.168.2.135) ✓ <u>DHCP</u> : Enabled on switches or gatew.▼				
		How to configure VLAN and DHCP2 >>				
		Access priority 5G: OFF				
		Save				



Advanced Configurations: Channel ,power and STA limitation

Go to "Channel" in the left.

L

□ Adjust "Channel", "RSSI " and Signal Strength, and "Max STA Count " for both 2.4G and 5G radio.

Ru	ijie AP	2.4G Network:	ON		1.Adjust channel. Channel "1", "6" an	d
Monitor	WiFi/WLAN		[Enforce switch from 2.4GH	z to 5GHz Network]	"11" are recommended in 2.4G	
6	Channel	Country:	China (CN)	•		
etwork	External Network				2.Adjust RSSI level. Select mode in d	rop
1	WDS	Radio Channel:	1	Current Channel: 1	down box	
ecurity	Internet Auth	RF Bandwidth:	20MHZ	•		
2 dvanced		RSSI:	Through-wall	•	3.Adjust station limitation. By default.	
ලා		Max STA Count:	32	(range: 1-128)	2.4G radio limitation is 32.	
chan	nel in drop do	wn box.		5G Network:	ON	
<u> </u>				Country:	China (CN)	
2.Adjust RSSI level. Select mode in drop down box			mode in drop	Radio Channel:	149 Current Channel: 149	
				RF Bandwidth:	20MHZ -	
3.Ad	just station lim	nitation. B	y default , 5G	RSSI:	Through-wall	
radio	limitation is 3	32.		Max STA Count:	32 (range: 1-128)	
				_		_



Networks

Advanced Configurations: Rate limit

Go to "WiFi/WLAN" in the left, select "Wlan name" in the right, unfold "Advanced settings" (we need to cerate the wlan first, then set the rate limit)
 The Unit is 8Kbits = 1KBytes, for example, input 256 if you want to limit each wireless STA at speed 256KB/s

RU	IJIE AP	WEB Model: AP740-1 Detail	🕞 Quick Settings	Online Service	R Simplified Chinese	🕞 Logou
Monitor	WiFi/WLAN	WiFi-1 WiFi-2 WiFi-3 WiFi-4 WiFi-5 WiFi-6 + V				
Network	Channel External Network	Note: This function is designed for ease of use based on user scenario. It is recommended to configure the function via Web instead of CLI.				
(!)		Wlan Id: 6 * Range(1-16)				
Security	Internet Auth	SSID: Eweb_69576 *				
2 Advanced		Encryption Type: WPA/WPA2-PSK				
Ô		WiFi Password: ewebwifi * Show Password				
System		* Advanced Settings 1.Unfold "Advanced Setting"				
		Hide SSID:				
		WiFi Type: 2.4G(radio1) 5G(radio2) 5G(radio3) [Is signal unstable or weak?]				
		2.4G(radio1) VLAN : 1(192.168.2.135) ∨ DHCP : Enabled on switches or gatew.▼ 5G(radio2) VLAN : 1(192.168.2.135) ∨ DHCP : Enabled on switches or gatew.▼ 5G(radio3) VLAN : 1(192.168.2.135) ∨ DHCP : Enabled on switches or gatew.▼ bHCP : Enabled on switches or gatew.▼ Enabled on switches or gatew.▼				
		Rate Limit: No Rate Limit/Smart Rate Limiting [Rate Limit Settings]	_			
		Access priority 5G: OFF Downlink: No Limi ×kB/s Uplink: No Limi ×kB/s Uplink: No Limi ×kB/s				
		Save No Limit 3.Save configuration				



Advanced Configurations: WDS

Go to both of the root bridge and non-root and create vlan for WDS first.

RL	IJIE AP	WEB Model: AP740-I Detail				C Quick Settings 2 Online Service 🖏 Sim
	VLAN	VLAN Settings				
<i>f</i> Sh	Port	+ Add VLAN X Delete Selected VLAN				
Vetwork	Route	VLAN ID	IPv4	IPv4 Mask	IPv6 Address/Mask	IP Source
(!)	DHCP	1				
Security	Ebag	10	10.10.254	255.255.255.0		Configuration Ed
2 Advanced	Multicast/Unicast	Show No.: 10 Total Count:2		N/I AN		I∢ First ∢ Pre 1 Next ▶
ත	Port Mapping			VLAN		~
System	iBeacon			VLAN ID : 2	* (Range: 1-4094)	
				IP: 102 169 2 1		
				1132.100.2.1	Configure the ip	address
				Advanced Settings		
				Mask: 255.255.255.0		
			IPv6	Address/Mask:	+	
					Save Ca	ncel



I

Advanced Configurations: WDS

□ Then add a new wlan on both of root bridge and non-bridge.

works		WEB Model: AP740-I Detail
tor	WiFi/WLAN	WiFi-1 WiFi-2 × + v
	Channel	Note: This function is designed for eace of use based on user scenario. It is recommended to configure the function via Web instead of CLL
\$) vork	External Network	Note. This function is designed for ease of use based on user scenario. It is recommended to configure the function via treb instead of CLI.
	WDS	Wlan Id: 2 * Range(1-16)
ty	Internet Auth	SSID: WDS *
) ced		Encryption Type: No Encryption Choose no encryption
3		Advanced Settings
em		Hide SSID:
		WiFi Type: 2.4G(radio1)
		2.4G(radio1) VLAN : 1 ▼ DHCP : Enabled on switches or gatewar
		5G(radio2) VLAN : 3(192.168.3.1) ▼ DHCP : Enabled on switches or gatewa
		5G(radio3) <u>VLAN</u> : 3(192.168.3.1) ▼ DHCP : Enabled on switches or gatewar
		How to configure VLAN and DHCP?
		Access priority 5G: Choose the corresponding vlan
		Save



Advanced Configurations: WDS

Go to choose WDS, and turn on the button of "5G Network WDS".
 And choose the wifi of WDS. Then save the configuration.

WFEWAAN Monitor WDS Root bridge Work External Network WDS Note: Buildings over 100 meters away from each other need to be connected by optical cables. However, C Topology WDS WDS Note: The APs used for WDS must be the same model. WDS VWDS OFF Security Socurity Internet Auth Security Operating Mode Root Bridge Non-root Bridge Operating Mode Root Bridge Non-root Bridge System Distance: Meters	RL	ijie ap	WEB Model: AP740-I Detail	Rujje AP	WEB Model: AP740-I Detail
Other WiFi Allowed: (If not ticked, the device has a better forwarding performance.) Save Save Save	Monitor Monitor Network () Security Advanced () System	WiFi/WLAN Channel External Network WDS Internet Auth	WDS Root bridge Note: Buildings over 100 meters away from each other need to be connected by optical cables. However, I Topology Note: The APs used for WDS must be the same model. 2.4G Network WDS: OFF 5G Network WDS: OPerating Mode Root Bridge Non-root Bridge Root Bridge Network WDS(0a69.6c88.695b) Other WiFi Allowed: (If not ticked, the device has a better forwarding performance.)	Monitor WiFi/WLAN Monitor Channel External Network WDS Security Internet Auth Advanced System	WDS Non-root bridge Note: Buildings over 100 meters away from each other need to be connected by optical cables. However, I Topology Note: The APs used for WDS must be the same model. 2.4G Network WDS: OFF 5G Network WDS: OP Operating Mode: Root-bridge Election SSID: Distance: Instance: Meters Other WiFi Allowed: (If not ticked, the device has a better forwarding performance.)



Advanced Configurations: Containment

Make the terminal which is connected to the rouge ap goes offline or has a bad internet experience.

	ZUJI	P AP	e web	Model: AP740-I	Detail					
Mon	Con tor	tainment	Cont	ainment Setting	js Con	tained AP	т	rusted AP	1	
Netw	Blac) ork Dyn	k/white Lists	Note: The following MAC addresses correspond to trusted APs, which will not be contained.							
	⁷ Use	klist Isolation	Trus	ted MAC:						
2		P/ARP		Add	😆 Truste	ed Vendor	List			
୍ଞ			oui:					Multi-to-Multi SSID:		
Syst	em				-+ A	dd				- Add
Monitor	Containment	Containment Sett	0-I Detail tings Contair	ned AP Trusted AP			Monitor	Containment	Containment Settings Contained AP Containment Mode: Contain APs with PSSI binbert	Trusted AP
() Network	Dynamic Blacklist	Note:The function d	Scan All Neighbor		ring APs ×		× Ø	Dynamic		Reflesh Every Minute
•		Rogue AP Contain	ment ON	SSID base		Coareb		Blacklist	SSID	MAC
Security	User Isolation		[Scan All N	3 SID-Dase		Search	Security	User Isolation	private-b/BC	0074.9c09.b7c1
2a	NFPP/ARP	Containment M	Mode: 🗹 Contain	SSID	MAC	Channel	O_	NFPP/ARP	adya	0274.9000.0701
Advanced	ACL		Contain	C	0015.ffc0.521c	153	∠© Advanced	ACL	@wyx-nanana	0286.1110.0904
ŝ				aaga	0274.9c00.b7c1	3	6		pppoe-ipoe	0614.4070.3585
System				RuiYi-C4A 0	0274.9c00.c4a5	7	System		rujie-802.1x	0614.4D70.3TD0
			🕑 Contain	@wyx-hahah	0286.1110.09c4	4			ruijie-802.1x	0614.4b70.3tbe
		Containment R	ange: O Scan/Co	CMCC-QUP	04b0.e7ac.84f4	6			MD-wireless-Z	0669.6c5c.0784
			Scan/Colored	pppoe-ipo	0614.4b70.3585	1			SSQ-1X	0669.6c77.f1e0
				pppoe-ipo	0614.4b70.3586	149			@790DAA	0669.6c79.0dac
			Save	ruijie-802.1 x	0614.4b70.3fbd	9			Show No.: 10 Total Count:80	
				ruijie-802.1 x	0614.4b70.3fbe	165	•			



Advanced Configurations: AP based User Isolation

Go to "Security " -> "User isolation" in the left .
 Wireless STA that is not in "Allowed MAC" list cannot visit other STA.
 Wireless STA that is in "Allowed MAC" list can visit other STA

RL	ijie ap	🖉 WEB Model: AP740-1 Detail 😨 Quick Settings 🙎 Online Service 🖏 Simplified Chinese 🕞 Logout
Monitor	Containment	User Isolation
<i>F</i>	Black/white Lists	Note: The function prevents users from communicating with each other without affecting their access to the network, ensuring service security.
W Network	Dynamic Blacklist	Note: Only Layer-2 isolation is supported currently.
• (!) Security	User Isolation	User Isolation: 1.Turn on User Isolation
Ja	NFPP/ARP	Allowed MAC:
Advanced	ACL	2.Fill in "Allowed MAC" (optional)
ژې سينې		Current MAC: 5869.6c88.6957
System		Save 3.Save configuration

Metwork

Advanced Configurations: AP based static Black & White list

Go to "Security" -> "MAC based Access Control" in the left.
 If "AP based blacklist" is enable ,STA in blacklist is unable to access AP.
 If "AP based white" is enable , only STA in whitelist is able to access AP.

RL	ijie AP	WEB Model: AP740-I Detail		🔀 Quick Settings 😟 Online Service 🛯 🖓 Simplified Chinese 🕞 Logout
Monitor	Containment	BlackList/WhiteList Settings		
6A	Black/white Lists	Note: The function specifies the users allowed to access the WiFi or denied from access	sing the WiFi . The MAC address is the hardware address of the client (such as laptop or mobile p	phone) associated with the AP.
Network	Dynamic Blacklist			
• Security	User Isolation	List Type: Deny MAC address from accessing WiFi (Blacklist) O Permi	it MAC address to access WiFi (Whitelist) 1.Select "black	klist " or "whitelist " mode
Q	NFPP/ARP	+ Add Users 🖪 Batch Import Users 🔘 BlackList capacity Settings		MAC-based: Search
⊂® Advanced	ACL	User Name	MAC	Action
۞ System			No Record Found 2.Add MA	AC address, username is optional
		Show No.: 10 V Total Count.0		I∢First ∢ Pre Next ▶ Last № 1 GO
		Current MAC: 5869.6c88.6957 [SSID-based Access Control]		
			3.Save configuration	



Advanced Configurations: AP based static Black list

- □ There is another way to add users into Black list.
- There is one thing needs to mention is that you can add user into blacklist, if there is a need to delete user from blacklist, please go to Blacklist/Whitelist.

Rujje AP	WEB Model: AP740-1 Detail Chinese Detail
Dashboard	User Info
User Info	Note: If you want to delete STAs from blacklist, please go to Blacklist/Whitelist.
Network	Refresh Blacklist 2 Click this button Search
Security	□ STA MAC ♀ IP ♀ Link Duration ♀ Speed(Kbps) ♀ RSSI(dB) ♀ Channel(Radio) Network Action
<u> </u>	User1 7423.448f.5376 192.168.2.1 0:00:06 Up: 88064/Down: 59392 52 149(2) Eweb_69576 No Limit Setting
Advanced	Show No.: 10 v Total Count:1 1 60
Ø	1 Chappenthe wear you want to add him into the blacklist
System	1. Choose the user you want to add him into the blacklist



Advanced Configurations : SSID based static Black & White list

□ Go to "Security" ->"MAC based Access Control" in the left.

If "SSID based blacklist" is enable ,STA in blacklist is unable to access WLAN.
 If "SSID based white" is enable , only STA in whitelist is able to access WLAN.

ſ	Username	M	AC: 1234.1234.1234	*× +Add
-	Current M/	AC: 1414.4b63.226a [SSID	-based Access Control	1.Select "SSID-based" mode ,switch to below UI
RU	IJIE AP	WEB Model: AP740-I Detail		🔽 Quick Settings 🖄 Online Service 🖏 Simplified Chinese 🕞 Logout
Monitor	Containment	BlackList/WhiteList Settings Eweb_69571 F	Eweb_69572 2:Select=SS	STD Eweb_69575 Eweb_69576 V
B	Black/white Lists	Note: The function specifies the users allowed to access the	WiFi or denied from accessing the WiFi . The MAC ad	C address is the hardware address of the client (such as laptop or mobile phone) associated with the AP.
Network	Dynamic Blacklist User Isolation	List Type: Deny MAC address from accessing WiFi	(Blacklist) O Permit MAC address to acce	access WiFi (Whitelist) 3.Select "blacklist" or "Whitelist" mode
	NFPP/ARP	+ Add Users ≝ Batch Import Users ⊚ BlackList	capacity Settings	MAC-based: Search
Advanced		User Name	Add Users	Action
رې System		Show No.: 10 V Total Count:0 Current MAC: 5869.6c88.6957	User	Username: MAC: +Add Default Max Blacklist STAs Based on SSID:256
				OK Cancel
			4	4.Add MAC address, username is optional
			5	5.Save configuration
				62000 2017Duttle Naturate Co. 114 1 Official Wateria I Sources Partial Dellars Sources I Sources Ma

Advanced Configurations: Dynamic blacklist

The device will identify the attack then add the user in blacklist for some time, then after the time expired the user will leave the blacklist automatically

RI	Jijie Ap	WEB Model: AP740-1 Detail		C Qui	🖈 Settings 🖄 Online Service 🖓 Simplified Chinese 🕞 Logout
C Monitor	Containment	Dynamic Blacklist Settings			
() Notwork	Black/white Lists Dynamic	Note: With attack detection and dynamic blacklist function enabled, the AP adds	the attack source to the dynamic blacklist automatically after identifying the atta	ack. When the effective time runs out, the attack source is removed from the	blacklist automatically.
	Blacklist User Isolation	Detection Mode: 🗹 Flood Attack Detection 🛛 🖉 Spoofing At	tack Detection 🛛 🗑 Weak Initialization Vector Detection 🖉 DI	DoS attack	
Security	NFPP/ARP	Dynamic Blacklist I on Open the fu	unction		
∠© Advanced	ACL	Effective Time: 300 * (Range:6	Configure the effe	ective time	
्रि System		Save			
		CRefresh X Delete Selected Item			
		Number	MAC	Effective Time	Action
		1	b8e8.560d.1fa4	90	Delete
		Show No.: 10 Total Count:1			I First ∢ Pre 1 Next ▶ Last 1 GO



Advanced Configurations: Nfpp/Arp

This nfpp function can monitor the attack, then will be shown in the log
 The function of arp can static bind the ip address with mac address and it can support manually bind and remove binding.

Ruíjie AP		WEB Model: AP740-1 Detail		WEB Model: AP740-1 Detail		C Quic	k Settings 🙎 Online Service 🖓 Simplified Chines
Network	Containmont		Containment Monitor	NFPP ARP			
لل Monitor	Containment	NFPP ARP	Black/white Lists	🚰 Dynamic Binding>>Static Binding 🖁 Remove static Bin	ding 📲 Manual Binding		IP-based:
	Black/white Lists		Network Blacklist	I P	MAC	Туре	Action
\otimes	Dunamia	ARP-guarc: 🗹 Enable ARP-guard, so as to prevent a large numb	User Isolation	192.168.2.3	98e7.f44c.f6a1	Dynamic Binding	Dynamic Binding>>Static Binding
Network	Blacklist	[ARP-guard List]	NFPPIARP	192.168.2.135	5869.6688.6958	Local ARP Entry	Dynamic Binding>>Static Binding
•			Advanced ACL	192.168.2.254	1234.5678.9abf	Dynamic Binding	Dynamic Binding>>Static Binding
U.	User Isolation	IP-guard 🗹 Enable IP-guard, so as to prevent hackers from so		10.10.10.254	5869.6088.6958	Local ARP Entry	Dynamic Binding>>Static Binding
Security		[IP-quard List]	System	192.168.3.1	5869.6088.6958	Local ARP Entry	Dynamic Binding>>Static Binding
2a		In the second se		Show No.: 10 Total Count: 5			I¶ First ¶ Pre <u>1</u> Next № Last №
Advanced	ACL	ICMP-guard: Chable ICMP-guard, so as to prevent a large fully					
-0-		<u>(ICMP-guaro List)</u>					
ŝ		DHCP.guard Rhable DHCP.guard, so as to prevent malicious re					
System		IDHCP-guard List					
		(error gada cied)					
		DHCPv6-guard R Enable DHCPV6-guard, so as to prevent maliciou					
		[DHCPv6-guard List]					
		ND-guarce 🖉 Enable ND-guard, so as to prevent Neighbor Disc					
		Display NFPP Log: [Display NFPP Log]					
		Save Restore Default Settings					



Advanced Configurations: ACL

There is also a acl function in ap, click "add acl" then "add access rule" and config
 Configure the acl time and then invoke it in the acl.

Ruijie AP	@ WEB Model: AP740+ Detail		Rau Ruíjie AP	EWEB Model: AP7404 D	etail			🛱 Quick Settings 🙎 C
Containment Monitor Blacklwhite Lists	ACL Settings ACL Time ACL Apply		Containment Monitor Black/white List	ACL Settings A	CL Time ACL Apply			
Dynamic Network Blacklist	ACL List 1 Add ACL Delete ACL + Add AC	X Delete Selected Access Rule Access Control Protocol Destination IP/Wildcard Destination port Tri	Network Blacklist		Time Object	Day	Time Period	
User Isolation Security NFPP/ARP		No Record Found	V User Isolation Security NFPPIARP			No Record	Found	
Log ACL	Show No.: 10 * Total Count:0	∏ Add Access Rule	Athenced ACL	Show No.: 10 * Tota	al Count O			
(i) System		ACL Type: Standard ACL (Source-address-based Control)	System			Add Time Object		
		ACL List: 1				Object Name: 123	+Add	
		Access Control: Permit Deny Time Period Please select a time period Time manager					4 <u>13.11</u> X	
		Any IP: (For all IP) Mask Config v IP: 192.168.2.1 Mask: 255.255.255					Save Cancel	
		OK Cancel						



Advanced Configurations : Built-in Web Authentication

- Go to "Network" ->"Internet Auth" in the left, select "Iportal" in the right.
- Authentication package : you can utilize default built-in web authentication page or you can customize it . For more information about page customization , see configuration guide accordingly.
- Authentication mode: This option indicates the place you store user accounts. You can store in remote Radius Server or in local system.
- In below sample, we utilize default authentication page and store user accounts in local system.

	ijie ap	WEB Model: AP740-I Det	1 Select type of "authentication page" here we select "default package"	
M onitor	WiFi/WLAN	ePortal iPortal	WeChat Authentication Advanced	
• 🛞 Network	External Network	Authentication Package:	Use user information on the server preferentially Use local user information preferentially 2. Selfect "authentication mode", here we select "use local user information (on
(!)	WDS	Authentication Mode	Use local user information on the server only Use local user information only	
Security	Internet Auth	Iportal Server Port:	(Range: 1025-65535. Default: 8081)	
2 Advanced		AD Push Mode :	No AD	
¢		SSID:	Please select an SSID. 3.Select SSID which you want to apply web authentication to.	
System			Save Clear	
				_



Advanced Configurations : Create local user accounts

- Click "Local User", enter Local user management.
- Click "Add User", fill in the "Username" and "Password". Click "Save" when finished.

	4.Create L	ocal users
Authentication Package: O Default Package O Custom Package	[Local User]	[Online User]

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5.4	local User		×
+Ado	1 User X Delete Selected User	Username-based:	Search
	Username	\$ Action	
	scott	Edit Delete	
Show	No.: 10 V Total Count:1	I∢ First ∢ Pre 1 Next ▶ Last ▶	1 GO

	\equiv A	dd User 6.Fill in Usernan click save when	ne and password , ×	
		Username:	*	
		Password:	*	
ienetworks.com P	age 40		Save Cancel	Ruíj

Advanced Configurations : Built-in Web Authentication Verification

- Before verification, it is recommend that turn off "Encryption Type" cause usually, we apply only one authentication method to a WLAN
- Connect your STA to SSID, then it succeeds to obtains IP address and DNS.
- □ Visit any website ,you will be redirected to authentication page .
- Input your credentials , pass the authentication and visit Internet

← → http://192.168.20.253.80 Ϙ マ C Veb authentication page	×	(→ http://192.168.20.253:80	e page ×
Rujje Rujje N	etworks	Rujje N	Networks
Wireless network 业 这 Usemame ^{scott}	Anonouncement	Wireless network 中文 Login Success	Anonouncement
Password •••••• Clear saved user information Login Remember me	If your device is an ios terminal , please follow these steps to turn off the automatic login option for	Collect Logout User Information User IP: 192.168.20.101 User MAC: 6036.ddef.4d22 SSID: NewWlan Time limit: NA Time used: 0d 00h 00m 08s	If your device is an ios terminal , please follow these steps to turn off the automatic login option for wireless networks: (1)Click [Settings] icon on the desitop (2)Select Settings in the [Wi-Fi] or
© 2012 Ruijie Networks Co., L	td.		



Advanced Configurations : Extra Features – Login Redirection

- □ The setup and clarified basic Built-in Web-Auth (iPortal) must be done.
- Basic template for redirection page
 - online-popup http://domain.name //The URL will pop up after success login on iPortal.
 - Iogin-popup http://domain.name //The URL will pop up while the iportal landing page loading.
 - time-interval xx //Config iportal login-popup time interval, count by hour, enter 0 for always pop up.
- **D** Example:

web-auth template iportal

page-suite default authentication I accounting iportal_account time-interval 0 login-popup http://www.ruijie.com.cn online-popup http://www.ruijienetworks.com



Advanced Configurations : Customize Landing Page Template (Copy out from AC)

Find the template landing pagedir flash:/portal/zip

xlab-ws6108#dir flash:/portal/zip Directory of flash:/portal/zip Number Properties Size Time Name Tue Jul 26 21:20:07 2016 gateway.zip 86.7k -rwx Tue Jul 26 21:20:07 2016 -rwx 91.0k default.zip 2 files, 0 directories 281,903,104 bytes data total (196,956,160 bytes free) 536870912 bytes flash total (196,956,160 bytes free) xlab-ws6108#

Copy out through tftp server

copy flash:/portal/zip/default.zip tftp://192.168.1.1/default.zip

□ Unzip the default.zip to a new folder.

퉬 style

favicon.ico

🕘 login_mobile.htm 🥘 offline.htm

offline_mobile.htm

Online_mobile.htm

Iogin.htm

😂] online.htm

check_offline.htm check_offline_mobile.htm

Description:

login.htm > PC login page

login_mobile.htm > mobile login page

offline.htm >PC offline page

offline_mobile.htm > mobile offline page

online.htm > PC online page

online_mobile.htm > mobile online page



www.ruijienetworks.com | Page 43

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Advanced Configurations : Customize Landing Page Modification

он те айготтанствойн оолон то

- Right click the login.htm file, then choose Wordpad.exe to edit the basic html coding.
- □ Find and match the bottom content and URL link.
- Browser

Clear saved use	ser information Remember me	wireless networks: (1)Click [Settings] icon on the desktop (2)Select Settings in the [Wi-Fi] or
	© 2012 Ruijie Networks	<u>Co., Ltd.</u>

Wordpad edit





Advanced Configurations : Customize Landing Page Modification

- □ Original content: "© 2012 Ruijie Networks Co., Ltd."
- **D** Change to "Welcome to Ruijie Networks."
- □ Original URL: "http://www.ruijie.com.cn"
- □ Change URL to http://www.ruijienetworks.com

LUGIII	Welcome to Ruijie Networ	ks.	
			http://www.ruijienetworks.com/

- Repeat all the html file with same content modification.
- □ Zip those html files into zip file. (Don't include the main folder!)



Advanced Configurations : Customize Landing Page Upload

On the AC iPortal page, choose [Custom package] to upload new modified template.





Advanced Configurations : Customize iPortal Verification

- Connect your STA to SSID, then it succeeds to obtains IP address and DNS.
- Visit any website ,you will be redirected to authentication page .
- Input your credentials , pass the authentication and visit Internet



Welcome to Ruijie Networks.

Advanced Configurations : Customize iPortal login page

- Enter folder Style, will get below file list.
- prepare a gif format picture with dimensions 468 x 105, name it as en_logo.gif , cover the original one to replace the logo on English PC login page





en_logo.gif	Date modified:	2015/11/24 10:31
GIF File	Dimensions:	468 x 105

Size: 13.7 KB Date created: 2015/11/24 10:31



Advanced Configurations : Customize iPortal login page

- When finished, open login.htm to verify. The Chinese login page remains the same, now switch to "English".
- □ The logo on English login page has changed.

Ruffe 锐捷网络	जवाहरलाल नेहरू विश्वविद्यालय Jawaharlal Nehru University
无线网络 English 用户名	Wireless network ±x Anonouncement Username If your device is an ios terminal , please follow these steps to turn off the automatic login option for wireless networks: (1)Click [Settings] icon on the
<u>清除已保存的用户信息</u> 登录 □ 记住我	Clear saved user information desktop Clear saved user information (2)Select Settings in the [Wi-Fi] or [wireless network] Login Remember me Kernember me (3)Select the wireless network Vou want to connect, click the



Daily maintenance : Modify super administrator Password

Go to "Settings" in the left, select "Password" in the right.
 You can modify Eweb Login password and Telnet password.

RL	IJIE AP	WEB Model: AP740-1 Detail	
C Monitor	Settings	Time Password Restore Enhancement SNMP DNS	
() Network	Upgrade Restart	Ξ Web Management Password	
(!)	Permissions	Username: admin	
Security	Logging	Old Password *	_
2 Advanced	Detection Tools	New Password: Fill in old and new password, "save" when finish	1
්ලි	Web Cli	Confirm Password: *	
System	System Mode	Save	
		Telnet Password(Telnet and Enable Password) Username: admin New Password: Confirm Password: Save	



Daily maintenance : Create a new administrator

□ Go to "System" ->"Permissions" in the left .

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You can create new administrator and grant authority accordingly.

Rujje AP	WEB Model: AP740-I Detail	[7	🔽 Quick Settings 🛛 🙎 O	nline Service 🚯 Simplified Chinese 🕞 Logout
Settings	Permissions	1.Add administrator			
Upgrade	+ Add Administrator				
Network		Username		Action	
Security			No Decord Found		
			No Recora Founa		
Advanced Web Cli	Show No.: 10 V Total Count:	20		ł	<pre></pre>
System System Mode					
Add Administ	trator		×		
		2 Fill in un	ornama 8 nacewor	4	
Userr	scott	* 2.1 11 11 05			
Pass	word:	*			
Confirm Pass	sword:	🔄 🔹 🕴 3.Grant at	uthorization		
Permis	ssion: - 🗹 🔂 All Pages				
	+				
	+ C Security				
	+ C CAdvanced	I			
	+ C System				
		4. Save save	Cancel		
enetworks.com	Page 51				Ruije

Daily maintenance : Configure Log Server

□ Go to "System" -> "Logging" in the left .

By default, logs are stored in local buffer. If you would like to save logs permanently, send logs to log server.

□ You need to install a tool on server to receive logs , like Syslog server.

Rujje AP		WEB Model: AP740-1 Detail	🔽 Quick Settings 🛛 🖄 Online Service 🖓 Simplified Chinese 🕞 Logout
Manitar	Settings	Logging	
MOTILOI	Upgrade	Note: I ocal loos are sent to the corresponding server in order of priority lev	al Hinher the level is sonner the lon is sent. The hinhest level 0 and the lowest is 7
89 Network	Restart		
\bigcirc	Permissions	Server Logging: ON 1.Enab	le Server Log
Security	Logging	Server IP:	2.Input Log Server IP
2 Advanced	Detection Tools	Logging Level: Informational(6) \checkmark	3.Select the log level. E.g you select
් (j)	Web Cli	Save	level 6, then all logs of level 1 - 6 are sent to log server
System	System Mode		



Daily maintenance : Upgrade System

- In this part, it is applicable for upgrade from 11.x version to 11.x version. Not application for upgrade from 10.4 to 11.x version.
- □ If 10.4 to 11.x upgrade is required , see Appendix.
- Visit Ruijie Partner FTP and download correct firmware. For FTP credential application, please get in touch with your local sales or presales.
- Check current firmware version before upgrade

RL	ijie ap	WEB Model: AP740	-I Detail				C Quick Settings	Online Service	R Simplified Chinese
M onitor	Settings	Local Upgrade	Online Upgrade						
() Network	Upgrade Restart	Note: Please downlo Tips: 1. Make sure th	ad the corresponding software ve hat the software version (main pr	ersion from the official webs ogram or Web package) ma	ite , and then upgrade the device with tches the device model. 2. The page	n the following tips. may have no response during upgrade. Please do not power off or restar	the device until an upgr	ade succeeded messag	e is displayed.
() Security	Permissions Logging	Download Soft	ware: <u>Download Software</u>	2					
2 Advanced	Detection Tools	File N	lame:	file	Upgrade Cancel	1.Check current soft	ware ve	rsion.	
່ (ີ່ວັງ System	System Mode								
iiiene	tworks co	ml Page	- 53						K

Daily maintenance : Upload firmware

- Go to "System" -> "Logging" in the left, select "Local Upgrade" in the right
- Browse and upload firmware, then click "Upgrade". System starts to verify firmware bin file and will restart automatically
- Do NOT POWER OFF AP or do any other operation during upgrade is in progress

(-)(-)	R http://192.168.110	.1/main.htm#.	P → C Ruijie-EWEB Network Mana×	
RL	IJIE AP	WEB Model: AP320-I	Detail	
	Settings	Local Upgrade	Online Upgrade	
8	Upgrade >	Note: Please downloa	id the corresponding software version from the official website , and then upgrade the device w	rith the follow
	Permissions	Tips: 1. Make sure that until an upgrade succe	at the software version (main program or Web package) matches the device model. 2. The pag seded message is displayed.	e may have
<u></u>	Logging	File Na	2.Browse and upload firmware ame: 5_S1N2-02_02192710_install.bin Browse Upgrade Cance	1
system	Detection			41%
	Web Cli			and a second



Daily maintenance : Verification

Go back to "Home" dashboard , verify current firmware version.

Rujje AP		WEB Model: AP740-I Detail	C Quick Settings 🙎 Online Service 🖏 Simplified Chinese 🕞 Logo	ut
• Monitor	Dashboard	Dashboard		
Ø Network	User Info	1. For security purposes, it is recommended you change the default system password. Ch	nange Password X	
() Security		CPU: 120% Memory : 73.2% O System Time Online Users Running Time: 0 d 01 h 17	Model: AP740-I Version: AP_RGOS 11.1(5)B9P5, Release(04180410) min 14 s MAC: 5869.6c88.6957 Device SN:G1LW30T000769	n.
2 Advanced				
۞ System		0.75	RX Traffic	
		0.50		
		0.25		
			01:17:15	
		Top 10 Traffics Downlink V	Detail RSSI Distribution Detail	



Daily maintenance : Import/Export Current Config

Go to "System" ->"Setting" in the left, select "Restore" in the right
 Export Current configuration files to backup.
 Import saved configuration files to restore.

Rujje AP		@ WEB Mo	del: AP740-I Detail					🔽 Quick Settings 🙎 Online Service 🖷 Simplified Chinese 🕞 Logout
	Settings	Time	Password	Restore	Enhancement	SNMP	DNS	
Monitor	Upgrade							
Ø Network	Restart	E Import	Export Configur	ation pdate the page du	uring import, or import w	ill fail. If you war	nt to apply the	e new configuration, please restart the device on this page, or the configuration will not take effect.
\bigcirc	Permissions		File Name:		file	Impor	tExport	t Current Configuration Import or Export configuration file
Security	Logging							
2 Advanced	Detection Tools	<u> =</u> Restor	e Factory Setting	js				
• r?s	Web Cli	Note: Aft	er the device is rese	t to the factory de	fault settings, all configu	rations will be re	emoved. Pleas	ase Export Current Configuration before resetting the device.
System	System Mode	Res	tore Factory Settin	gs				
		Display	Current Configurati	ion				
								DUT

Network

Daily maintenance : Restore Factory Setting

Go to "System" ->"Setting" in the left, select "Restore" in the right
 Restore factory settings, all configurations are removed and AP resume to Fit mode.

Rujje AP		WEB Model: AP740-1 Detail Cuick Settings 🖄 Online S									🕞 Logout		
Manitar	Settings	Time	Password	Restore	Enhancement	SNMP	DNS						
MONILOI	Upgrade	= Import/	Export Configur	ation									
8 Network	Restart	Note: Plea	ase don't close or up	pdate the page du	uring import, or import w	ill fail. If you war	it to apply the	new configuration, please restart the device on this page, or the configuration will not take effect.					
(Permissions		File Name [.]		file	Import	Export	Current Configuration					
Security	Logging				IIIC	impon	Lypoir	Gunen Gonnguration					
2 Advanced	Detection Tools	<u> </u> Restore	Factory Setting	IS									
්රා	Web Cli	Note: Afte	Note: After the device is reset to the factory default settings, all configurations will be removed. Please Export Current Configuration before resetting the device.										
System	System Mode	Rest	ore Factory Setting	gs R	estore d	efault	setti	ng					
		Display C	Current Configurati	on									
										RI	πe		

Networks

Appendix : Upgrade from 10.4 to 11.x

- □ The software version RGOS 11.x is released in late 2014, compare with old 10.4 version, it has better performance and more features.
- Nearly all the wireless controller and AP support upgrade to 11.x software version.

In this part , you will know how to upgrade FAT AP from 10.4 to 11.x software version with TFTP Server via CLI .

Step 1 Log on to CLI via console / telnet , verify that FAT AP Current version is 10.4.
 Ruijie#show version

□ Step 2 Setup TFTP Server, prepare firmware. You need to upgrade twice.
 In 1st upgrade , FAT AP upgrades from 10.4 to 11.x interim version.
 In 2nd upgrade , FAT AP upgrades from 11.x interim to 11.x latest version.



Appendix : Upgrade from 10.4 to 11.x

□ Step 3 Start to upgrade .Remember to save and backup configuration file before upgrade.

1st upgrade : **Ruijie#copy** tftp://192.168.1.100/AP_RGOS11.1(2)B1_AP320_v1.0_upgrade.bin flash:rgos.bin Ruijie#**reload**

2nd upgrade : Ruijie#**upgrade download**

tftp://192.168.1.100/AP_RGOS11.1(2)B1_AP320_01240204_install.bin Upgrade the device must be auto-reset after finish, are you sure upgrading now?[Y/n]**y**

□ Step 4 Verification

Ruijie#show version





Ruijie Networks Co.,Ltd. 11th Floor, East Wing, ZhongYiPengAo Plaza, No.29,Fuxing Road,Haidian District, Beijing, P. R. China. Tel: 010-51718888 Mobile Tel: 1388888888 Fax: 010-51718888 www.ruijienetworks.com E-mail: *********@ruijie.com.cn