Ruije

A simple way to deliver an ideal office network in Cloud APP

I. Applicable Scenario

Traditional office networks require hardware servers, authentication database software, and a professional engineer team to manage them, which leads to high costs and increases the complexity of network. This document introduces a simple way to establish an ideal office network with security authentication, APP block, and VPN feature.

II. Network Topology



Vlan Setting: Vlan 1: 192.168.110.1/24 -----Boss Vlan 111: 192.168.111.1/24 -----Guest Vlan 112: 192.168.112.1/24 -----Staff

Note:

Before starting the configurations, please make sure that all devices are online on Ruijie Cloud, the type of project is 'Office' and all VLANs associated with the configuration have been created successfully. In this document, we created Boss VLAN, Guest VLAN and Staff VLAN respectively for testing in this office network.

III. Configure Steps

Configure a captive portal authentication for guest network.

Block the staff network to access to Apps.

3 Configure VPN on the device for client remote login.



IV. Configure Process for Portal Authentication

Create the authenticated accounts for guest by using 'User Management' feature.

As shown in Figure 1–4, click the 'User Management' button on the project home page to create a new user group at first. You can customize the attributes of the user group, including the user group name, concurrent devices, Period, the Data Quota, etc.

1	EG209		2	User Management	Å
Office d BYOD	User Management Enabled	Smart Flow Contro Enabled	User	User Group	
Project Excell	Status lent >	Uptime 11 d 4 h			
Notice New version	n is available. CP server conflict:MAC:0	2022-11-22 2022-11-22			
Online Devices: 4 Offline Devices: 0	Internet	Topology >			
	EG209GS	Network Planning			





IV. Configure Process for Portal Authentication

As shown in the Figure 5–7, after creating a user group, you need to create an account for authentication. Taking account as an example, after selecting the corresponding user group, the created account will inherit all the attributes of the user group. The username of the created test account is 'Guest1', password is 'ruijie123.'

5 User Management 😪	6 Add Account	7 User Management ≪
User User Group	Account Settings	User User Group
Account Voucher ? Q Search	User Name Guest1	Account Voucher ? Q Search
0 0 0 Total Activated Expired	Password ruijie123.	1 0 0 Total Activated Expired
	User Group	Account Password User Group Status >
	Guest_Accounts ~	Guest1 ruijie123. Guest_Accounts Not used
	Allow VPN connection	The End
	By enabling this option, the user can use this account to log in remotely using a VPN.	
	User Information \oplus Fold	
No Data		
NO Data		

Save

Add Account

Create an account authentication portal for the guest network.

As shown in Figure 1–4, click the 'Network Planning' button on the project home page to configure the guest network. Select the guest VLAN 111 to enter the configuration interface. You can customize the name and encryption method of the guest WiFi. You need to enable the 'Captive portal Auth' feature and select the correct portal template so that the clients can authenticate. And then the clients in the authentication IP range will be authenticated.

1	EG209		ର ଯ	2	2 Network Planning			Ŋ	
Coffice	Basic Enabled	Nev Network Planning Enabled	Application Pol Enabled	Add	MGMT	VLAN10 arm	VLAN111	VLAN112)
	Project Stat Excellent	us Ur > 11	otime d 13 h	VLAN ID IP (SVI) DHCP Serv	er	111 192.168.111.1 MACC741845	962	Configuration	ν 1
Notice Alarm	New version is a Multiple DHCP se	vailable. erver conflict:MAC:0	2022-11-22 2022-11-22	DHCP Pool Used IPs Lease Time	6) 6)	192.168.111.1~ 6 8h0m	192.168.11	Delete	
Online De Offline D	evices: 4 Devices: 0	Internet	Topology 🗦			1		6	



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IV. Configure Process for Portal Authentication

3 Edit Network		4 Edit Network
WLAN Setting		WLAN Setting
SSID/Wi-Fi Name Guest_WiFi		SSID/Wi-Fi Name Guest_WiFi
Encryption		Encryption
Captive Portal Auth		Captive Portal Auth
Portal Name Guest_Portal	~	Portal Name Guest_Portal
Bandwidth Limit Per User		Bandwidth Limit Per User
VLAN ID 111		VLAN ID 111
Cancel	ОК	IP Range (254 IPs) 192.168.111.1 — 192.168.111.254
Select Portal	+ Add Portal	
Account Login		



As shown in Figure 5–7, the guest has connected to this WiFi and obtained the IP address of VLAN 111. The pre–configured portal template has displayed on your phone. After entering the correct account and password, the guest is able to access the network.



V. Configuration Process for APP Block

As shown in Figure 1–4, click the "Application Policy" button on the project home page to enter the configuration interface. Add a new policy and select the staff IP segment, then select the APPs which need to be blocked. At the same time, you can also choose the policy type and customize when the policy takes effect. In this test, staffs will be blocked to access these APPs during the working days.



V. Configuration Process for APP Block



Online Client			
0			
Reyee AP Channel Interference	View More $>$		
Tool Kit			
		Add Policy	
3 Application Policy		4 Application Policy	
Policy Name Staff_Block		Policy Name Staff_Block	
Enable		Enable	
User	1 Selected	User	1 Selected
192.168.111.1-192.168.111.254	\sim	192.168.111.1-192.168.111.254	
Application	131 Selected	Application	131 Selected
LOL PUBG ArenaofValor Dota2	WOW Dia	LOL PUBG ArenaofValor Dota2	WOW Di
Policy Type			
BLOCK	~	Cancel	OK
Time		Q Search	131 APPs
Weekudys		Communication	
		▶ Video	~
		Shopping	~
		▶ Play	~
		Databank	
		P2PSoftware	
		AppStore	
		Payment	
Add Policy			
·			

As shown in the following test results, when the staffs connect to VLAN 112, they cannot access to the shopping APPs.



V. Configuration Process for APP Block



VI. Configuration Process for VPN

As shown in Figure 1–4, click the "VPN Settings" button on the project home page to enter the configuration interface. In this page, you can select four types of VPN and customize the IP address range.

1 EG209	2 VPN Setting
CCTV Office BYOD BYOD	VPN Type Open VPN
Enabled on 1000+ Reyee projects.	Enable Open VPN
<image/> VPN Up of the second	
Config Step	Cancel OK
1 Select VPN type	Open VPN
3 Configure VPN parameters	O L2TP Over IPsec
	L2TP



VI. Configuration Process for VPN

3 VPN Setting	4 VPN Setting	?
VPN Type	VPN Server	
Enable L2TP	L2TP Server IP/DDNS 172.26.5.175 IP Pool 10.70.17.2-10.70.17.254	>
Server IP Ruijie DDNS ? 172.26.5.175	VPN Online Users	>
Local Tunnel IP 10.70.17.1		
IP Pool (253 IPs) ⑦ 10.70.17.2 _ 10.70.17.254		



Then, you need to log in the device eWeb page to create the VPN clients. In this test, add a user with the username 'Boss' and the password 'Boss123'. When the "Boss" connects to this network via VPN, you can see it in "VPN Online Users" list.

5 EGW		Hostname: EG20 Model:EG209GS	09GS 🖉			Software Ver: MGMT IP: 172 MAC: (2.26.5.175 🖉			
Port Status	Overviev	w Network ~	Security ~	Behavior	VPN ^	dvanced ~	Diagnostics ~	System ~		
VLAN Info	i vp	PN Clients			IPSec					?
► More	VPN C	lient List			L2TP PPTP		ord Q	+ Add	🗓 Delete Se	lected
	Up to	100 entries can be	added.		OpenVPN VPN Clients	-				
		Username	Password	⊶ Serv	ice Type Netv	vork Mode	Client Subnet	Status	Acti	ion
					No D	ata				
	< 1	> 10/pag	je 🗸							Total 0
6 Jser			× 7		VPN Setting	?	8	VPN Onlir	ne Users	C
Service Type	ALL	~	VPN	Server			🔍 Search		0	nline (1)
* Username	Boss		L2TF Serve	o er IP/DDNS	172.26.5.175	>	User Name	Virtual User IP	User IP	Actior >
* Password	Boss123	۵	IP Po	ol	10.70.17.2-10.70.17.254		Boss	10.70.17.2	172.26.11.222	Remove
Network Mode	PC to Router	~	VPN	Online Users	5	>				
Status										
		Cancel								

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