



= K H a Â Õ Å

8 9 8 > x æ . Ò —

8 - 5 9 H

g é • ^ Y u <

• 'Ñ f

©2019



± • Ñ f

ø W

•  $\bar{y} f$

RGOS 10.4 (3b103)

~ À \* Š

ê ± V

<http://www.ruijie.com.cn/>

<http://Webchat.ruijie.com.cn>

<http://www.ruijie.com.cn/service.aspx>

7× 24

4008-111-000

<http://bbs.ruijie.com.cn/portal.php>

<http://www.ruijie.com.cn/service/know.aspx>

[4008111000@ruijie.com.cn](mailto:4008111000@ruijie.com.cn)

ü » ž j


[ ] [ ]

{x|y|...}

[x|y|...]

//

2)



---

3)

= K H a Â

é

---

RSR10-X

---

### 1.1.1 ^ O

Web IE Firefox Chrome

Web Web Web Web  
Web IE Firefox Chrome

### 1.1.2 Á - ½

= K H § —

Web Web HTTP  
HTTPS TLS1.0

= K H Ð O

Web Web Web Web Web  
IE Firefox Chrome Safari

' &

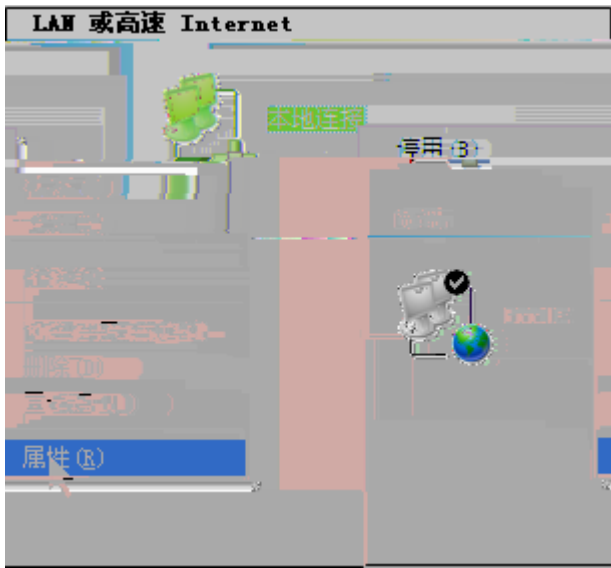
### 1.2.1 ' ° Ê

§ — L -

Web  
Web  
IP

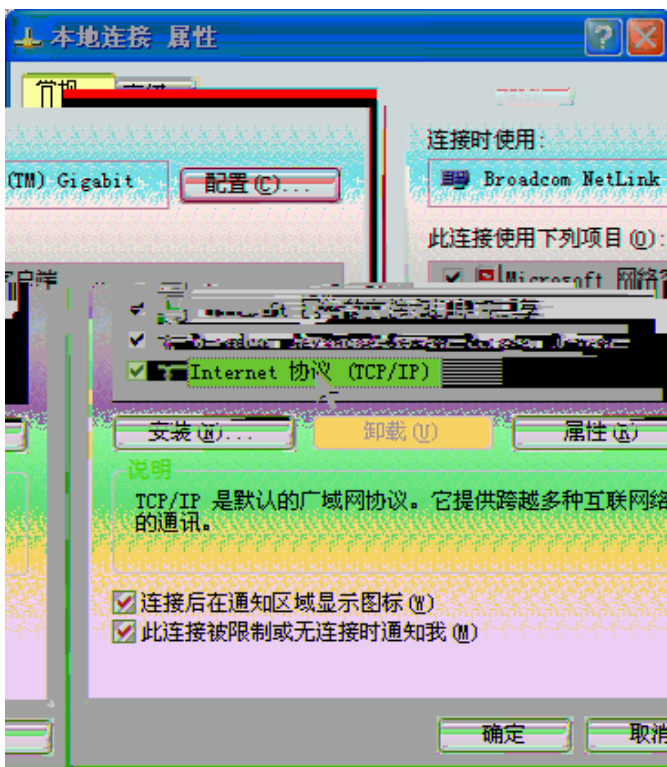
---





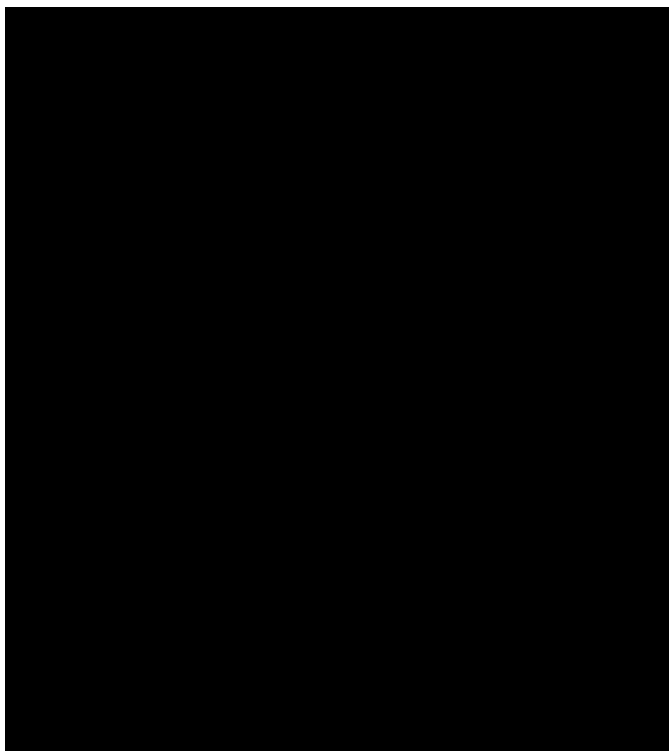
" " " " " Internet TCP/IP "

1-2



" " PC IP  
 " Internet TCP/IP " " IP " " IP " 192.168.1.xxx xxx  
 2 254 " " 255.255.255.0 " " 192.168.1.1 IP

1-3



IP 192.168.1.1 PC IP 1, " "

PC

PC " " ->" " ->" cmd" ->" "

Ping Ping 192.168.1.1

1-4

**Pinging 192.168.1.1 with 32 bytes of data:**

**Reply from 192.168.1.1: bytes=32 time<1ms TTL=64**

**Reply from 192.168.1.1: bytes=32 time<1ms TTL=64**

**Reply from 192.168.1.1: bytes=32 time<1ms TTL=64**

**Reply from 192.168.1.1: bytes=32 time<1ms TTL=64**

**Ping statistics for 192.168.1.1:**

**Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),**

**Approximate round trip times in milli-seconds:**

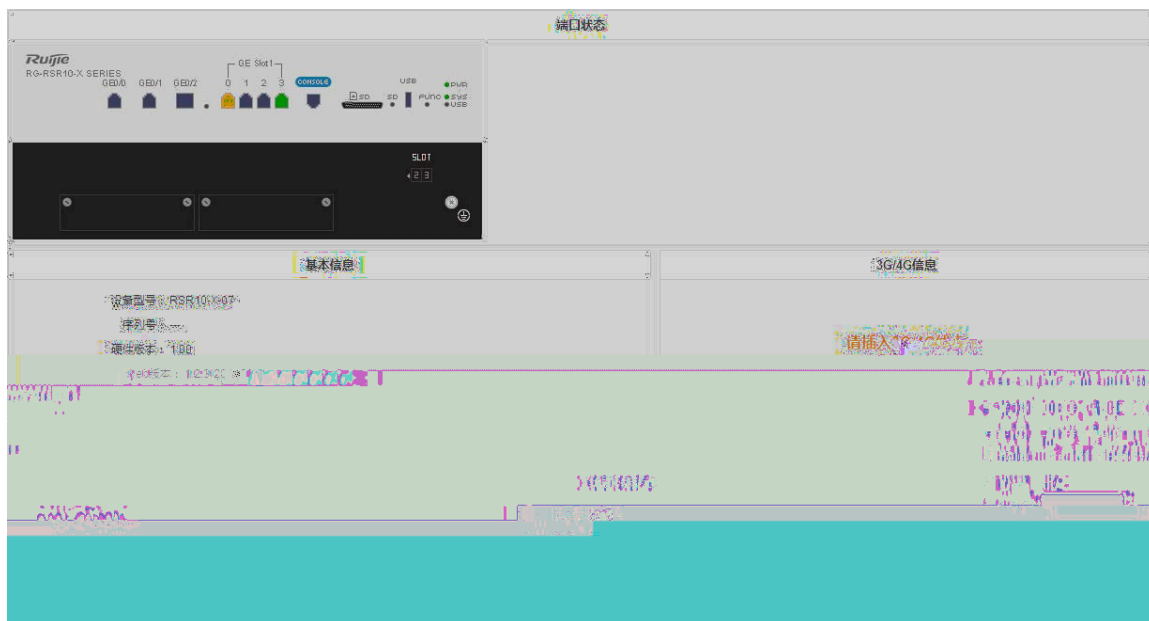
**Minimum = 0ms, Maximum = 0ms, Average = 0ms**

1-5





1-7:



### 1.2.4 =KHÙ,,^O

Ù,,5 R

RSR Web 1-8

1-8 Web



1-8Web

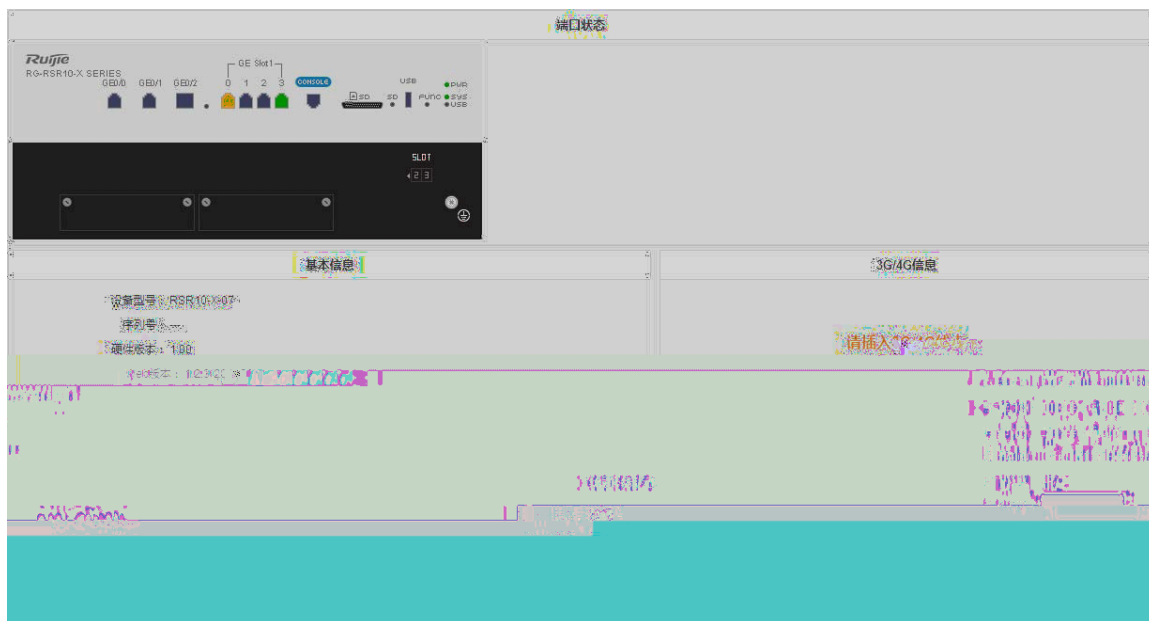
x f'

### 1.3.1 f Ô R

Web

CPU

1-9



### 1.3.2 ¼ û ´

: Ê -

Web

\$ 4 · g K : Ê - a ´

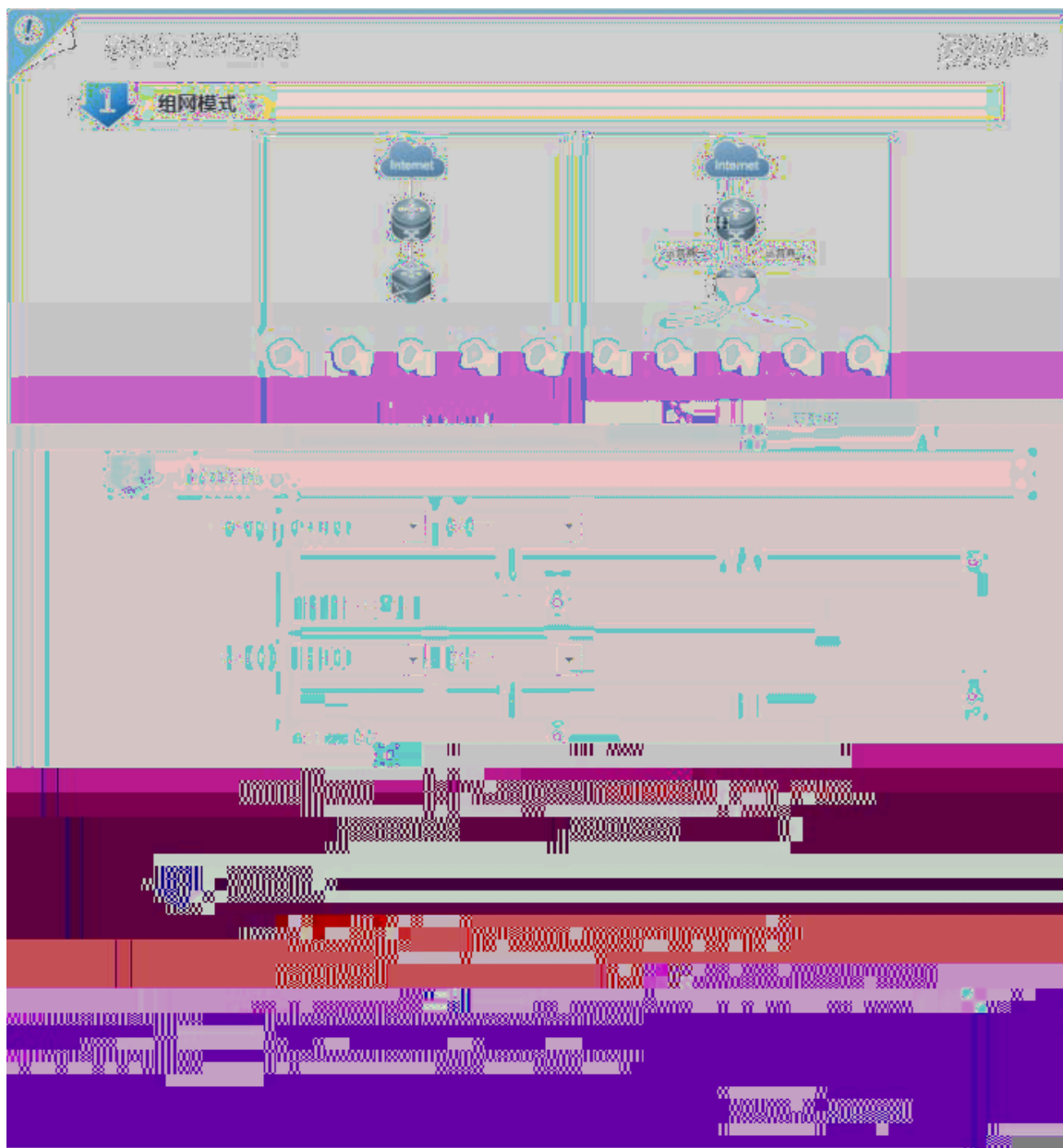
IP /Mask PPPoE(ADSL)

1-10



D4.gK:Ê<sup>-a</sup>

1-11



IP /

DNS

1-2 DNS

DNS

DHCP

IP

IP

PC

IP

IP /

IP

IP IP

LAN IP

Web 80 Web URL <http://192.168.1.1:8088/index.htm>

URL " 8088" Web Web

Telnet Telnet Telnet

ARP ARP ARP ARP

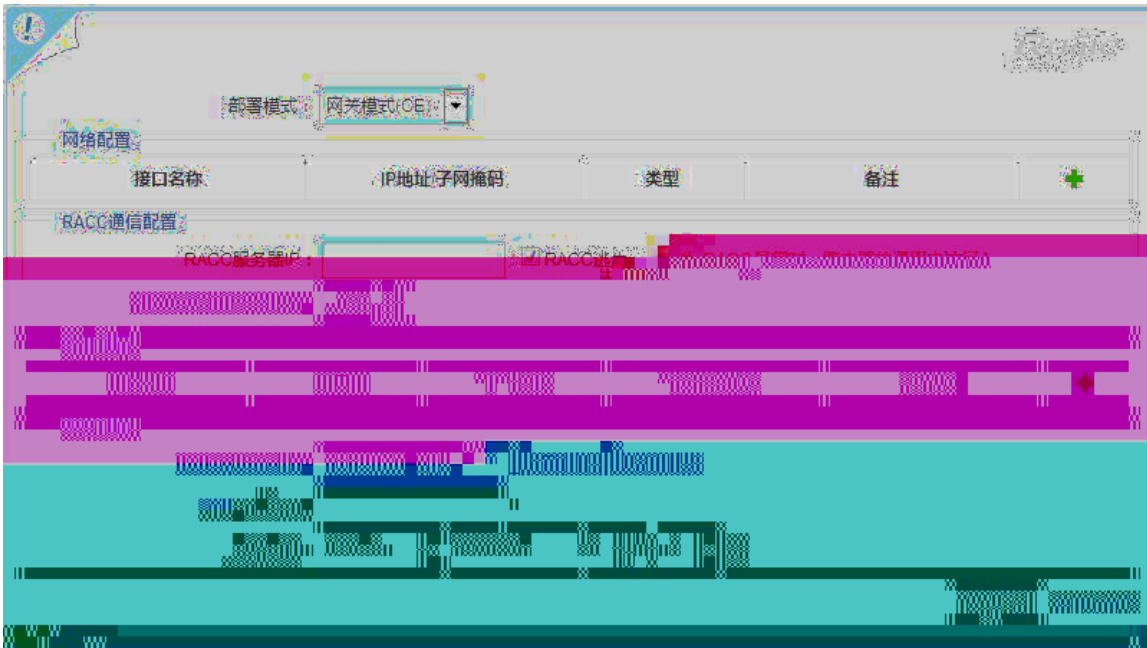
600 10 3600 1

ARP ARP

ARP 1

ø ‡ Ð 'òçSAÀp6°

1-13



→ 'u

RACC IP  
PE IP  
IP

8')) ù' 'u

RACC IP  
RACC  
RACC IP

·Ò 'u

RACC

¾T 'u

RLOG RACC  
PC PC  
PC :

MCE Multi-VPN-Instance CE CE CE  
CE

1-14



→ 'u

RACC IP

PE IP

IP

8')) 'u

RACC IP

RACC

RACC IP

·Ò 'u

RACC

¾T 'u

RLOG

RACC

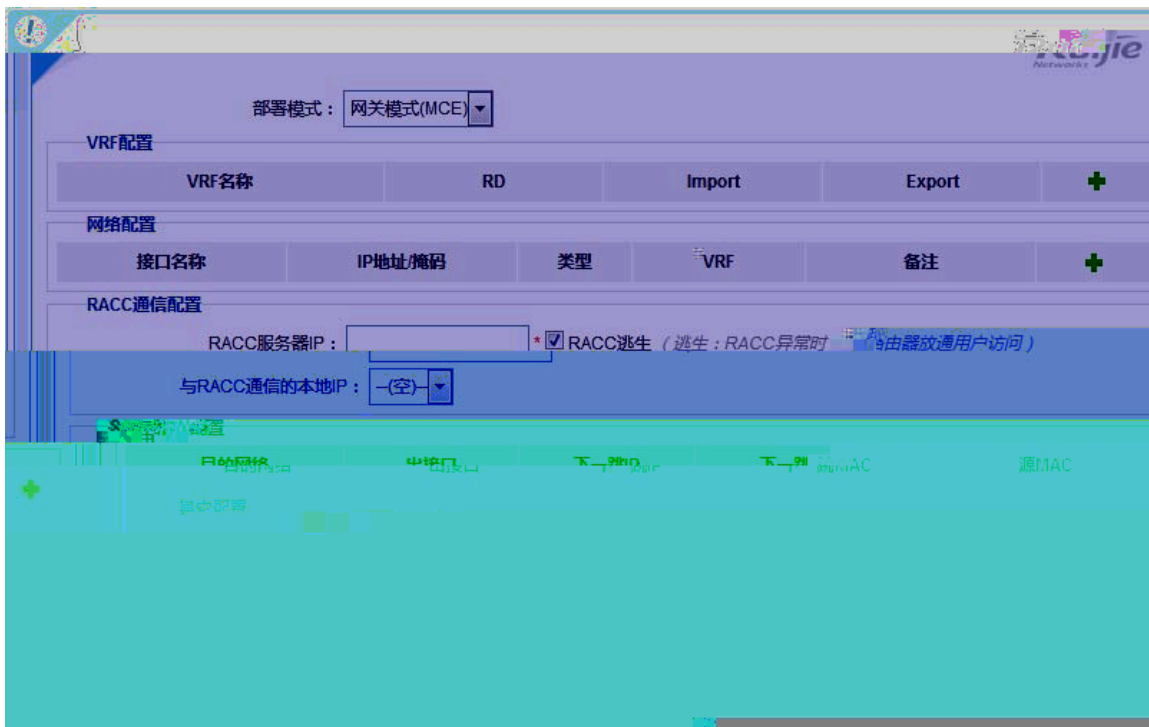
PC

PC

:

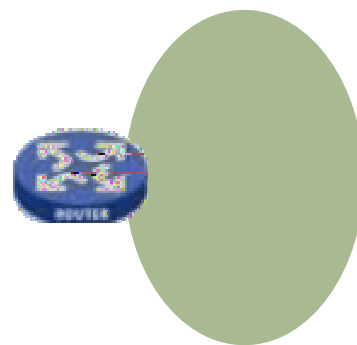
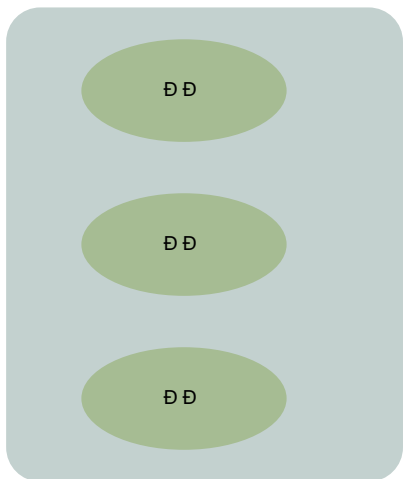
PC

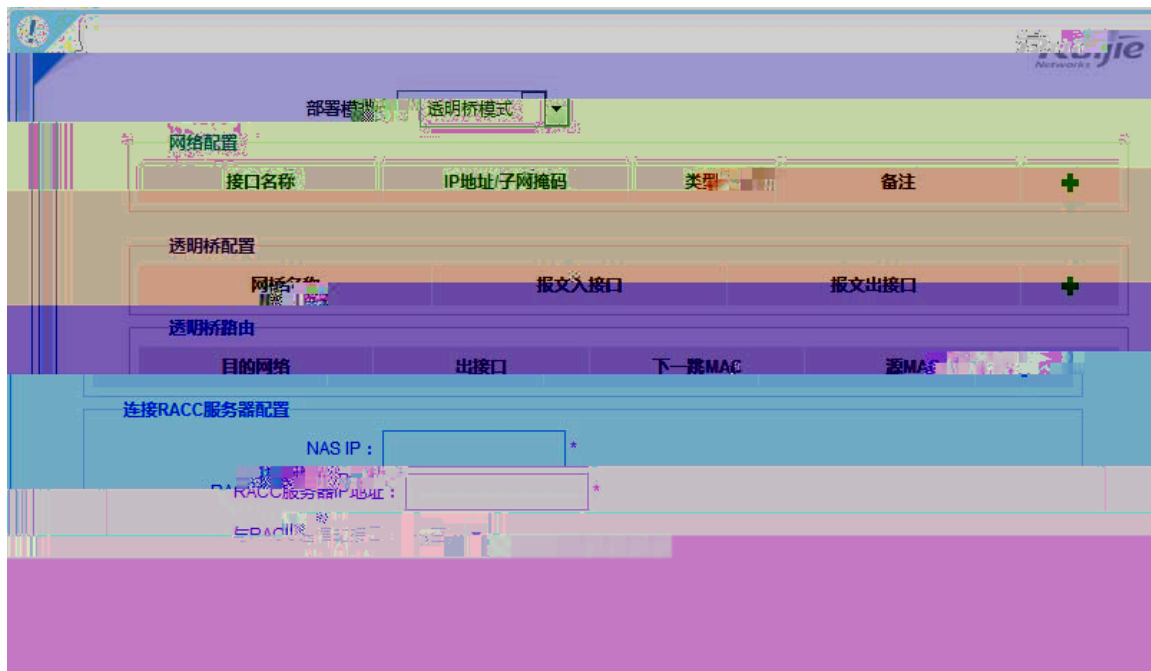
1-15



Bridge      MCE   PE      MCE   PE      IP  
                 Bridge

1-16





→ 'u

RACC IP

ô f ê 'u

VLAN VLAN

8')) ù 'u

RACC IP RACC

RACC IP

RACC

RACC IP

· Ò 'u

RACC

¾ T 'u

RLOG RACC

PC PC :

PC

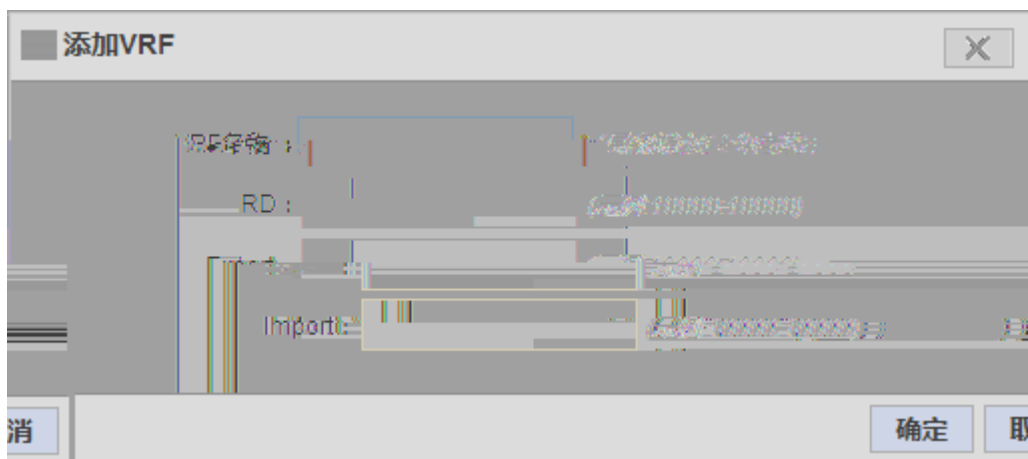




The screenshot shows a web interface for VRF configuration. At the top, there are buttons for '添加VRF' (Add VRF) and '删除' (Delete). Below is a table with two columns: 'VRF名称' (VRF Name) and 'RD(Route Dist)' (RD(Route Dist)).

VRF名称	RD(Route Dist)
Internet	1.200
public	1.100

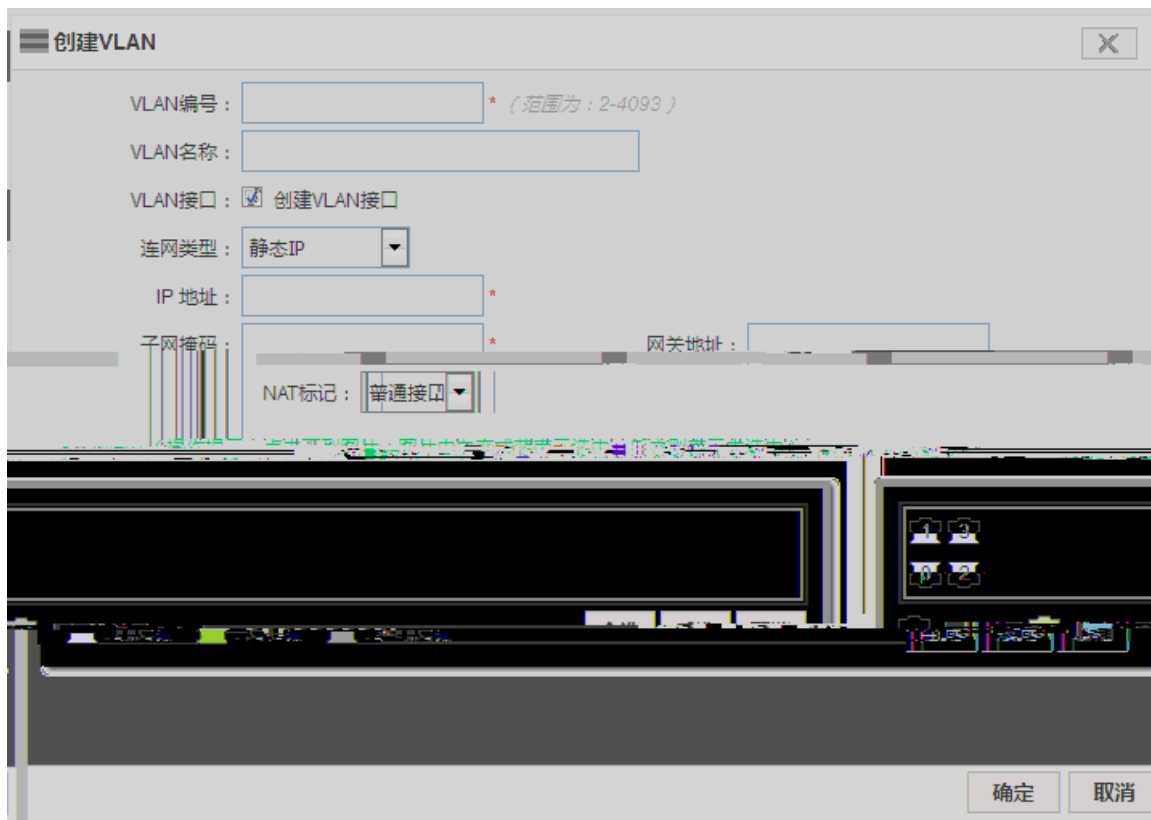
1-20 VRF



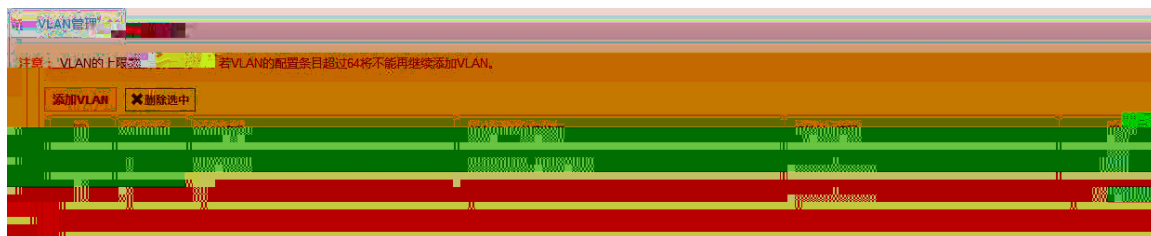
<2 •a Ã P 0

:

VI3



1-22



/La Â

VLAN

7 B @ & / L

	VLAN ID	Trunk	PC
Access			
down	up		
TRUNK	VLAN	VLAN	
ACCESS	VLAN	VLAN	PC

B · Ò / L

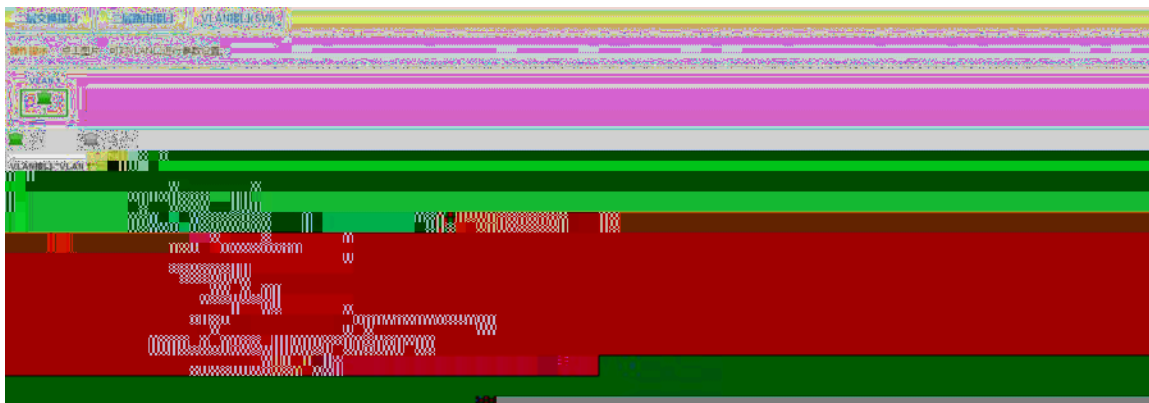
NAT

up  
IP

down

IP PPPoE

< 2 ' 4 / L 9 < /



4': '

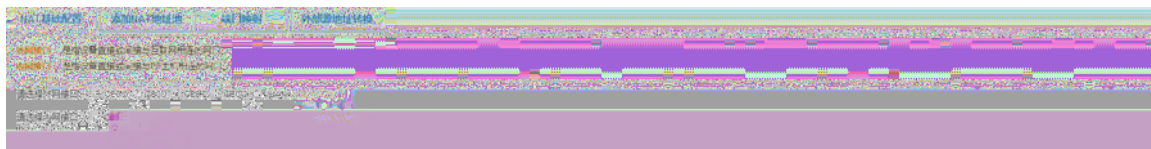
4': Á '

NAT " Network Address Translation" " " IP IP

Internet

NAT

1-26

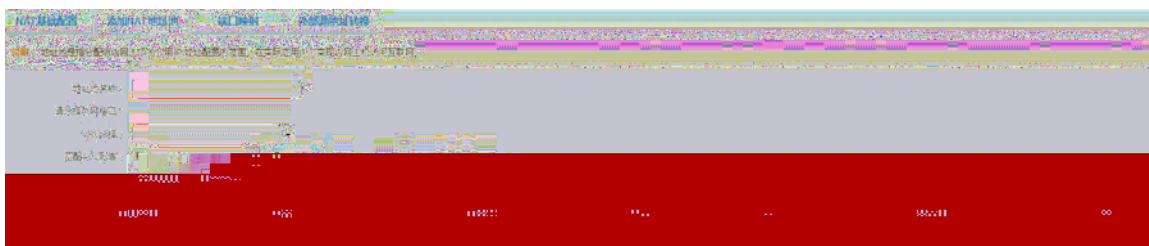


PPPoE IP

n 4': © ~ 1

nat IP

1-27



OL+/

1-28





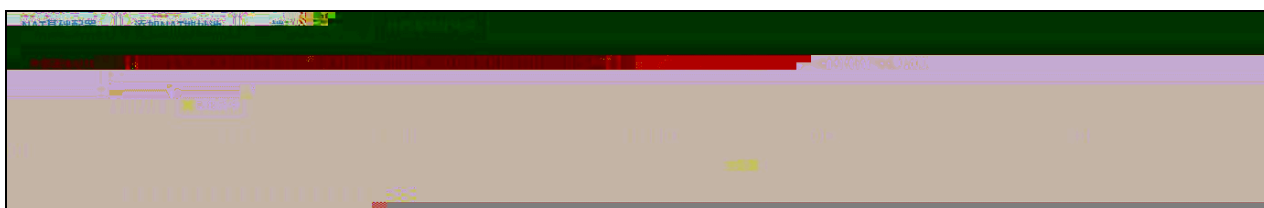
IP IP IP IP IP

IP IP IP IP

∅ | © ↵ Æ &

IP + IP +

1-30



\* 4 9 '

DNS Ping DNS IP DNS

1-31



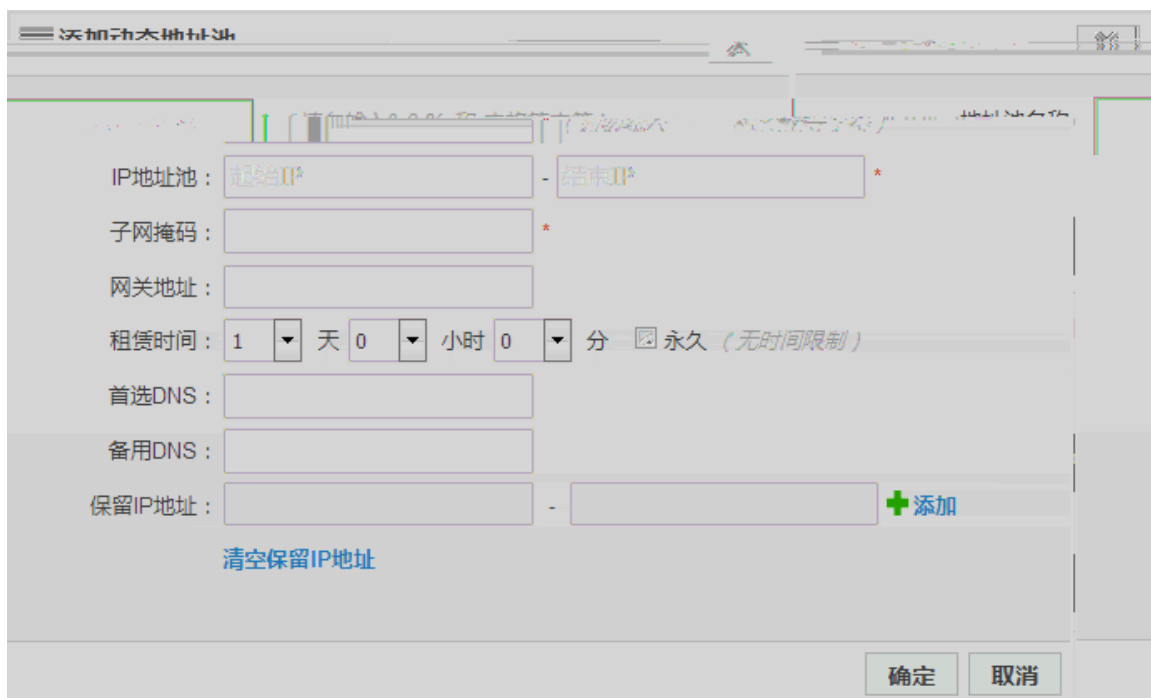
1-33



DNS

LAN

1-34



IP

IP

IP

DHCP

DNS

DNS

DNS

DNS

IP DHCP

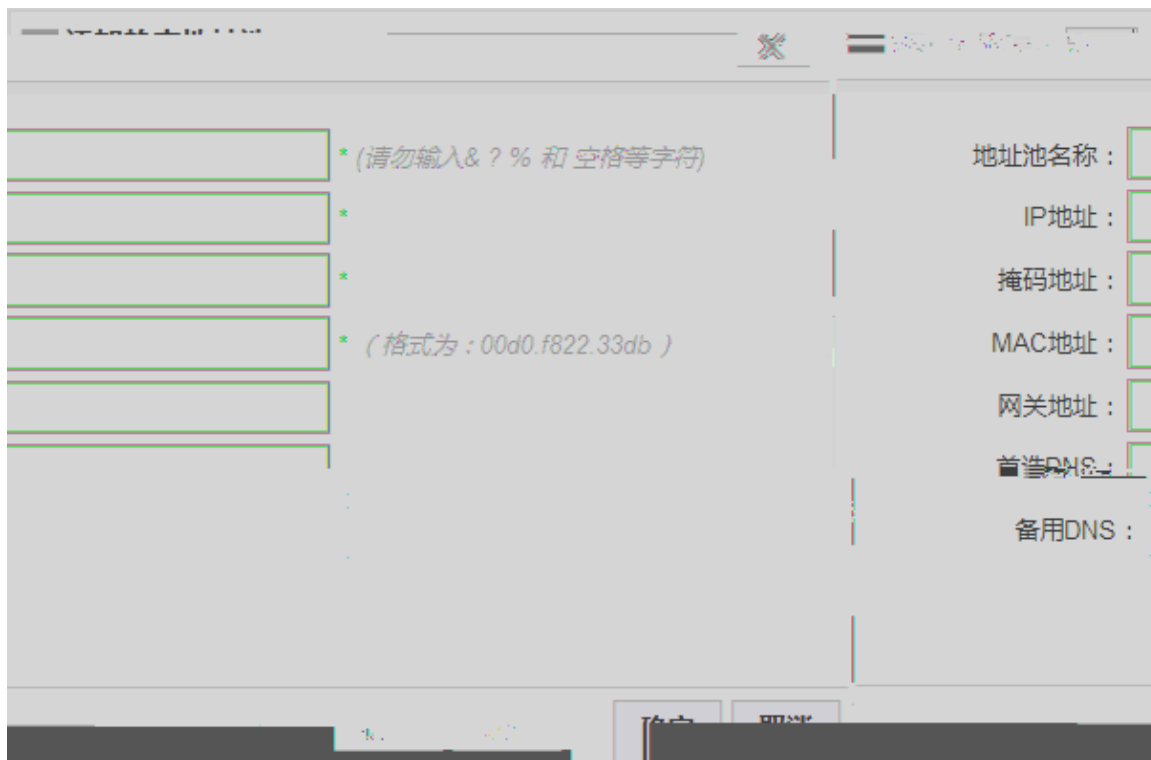
ip

n •4Æ © - 1 g

MAC

IP

1-35



IP

IP

IP

MAC

MAC

( )

DNS

DNS

( )



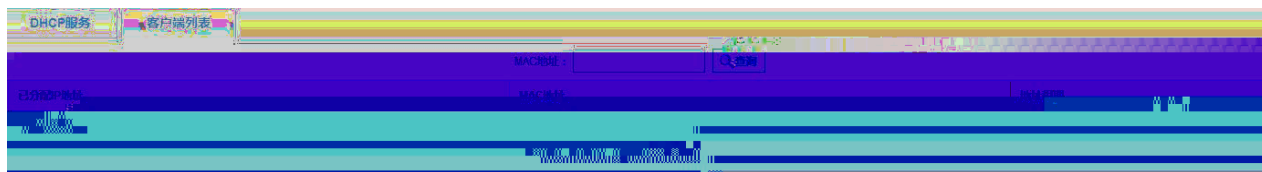
MAC

IP

Ð O æ =

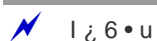
IP

1-36



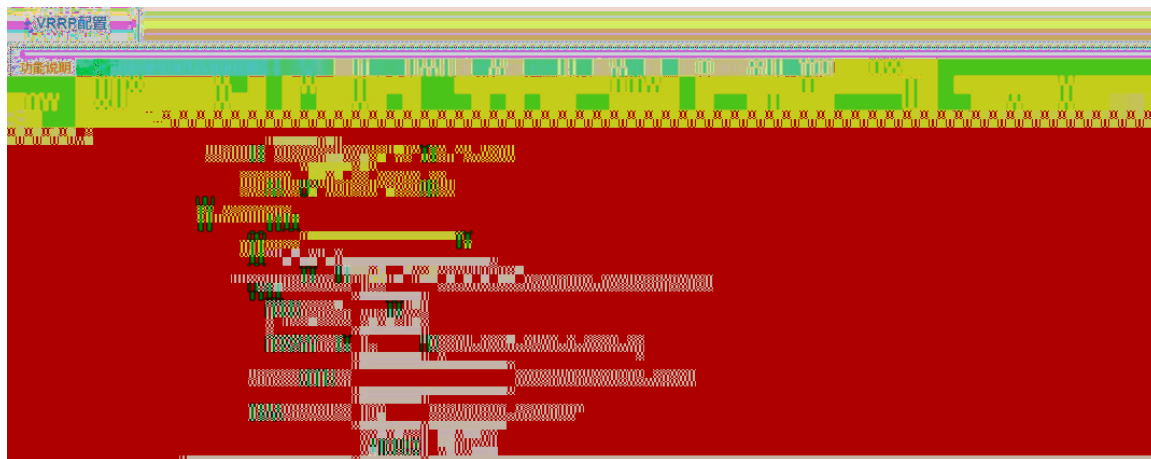
< 8 8 6

VRRP



VRRP

1-37

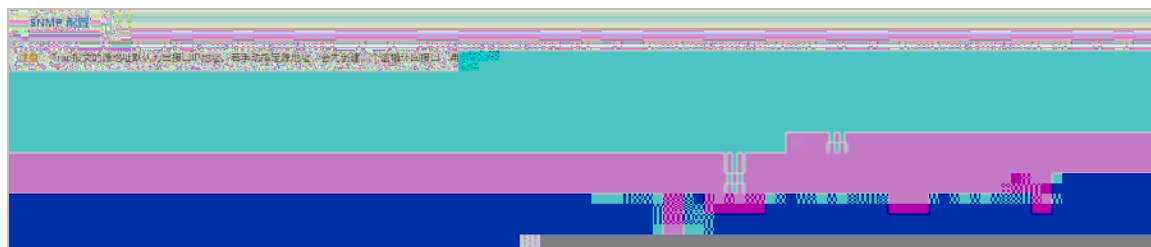


9 4 3 6

SNMP Simple Network Management Protocol

SNMP  
SNMP

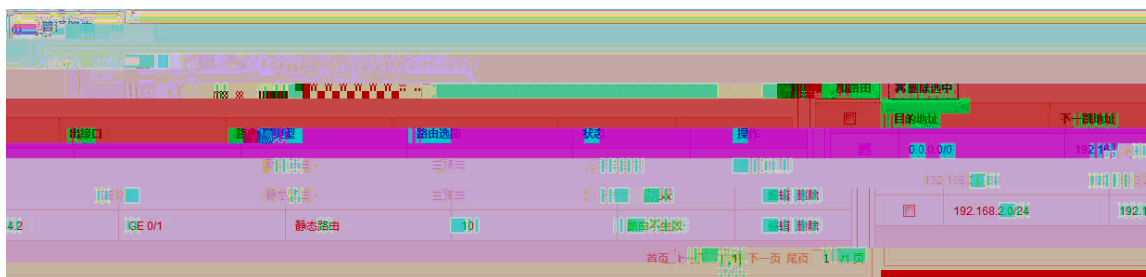
1-38



1.3.4 .Ò ´

•4Æ ·Ò

1-39



IP

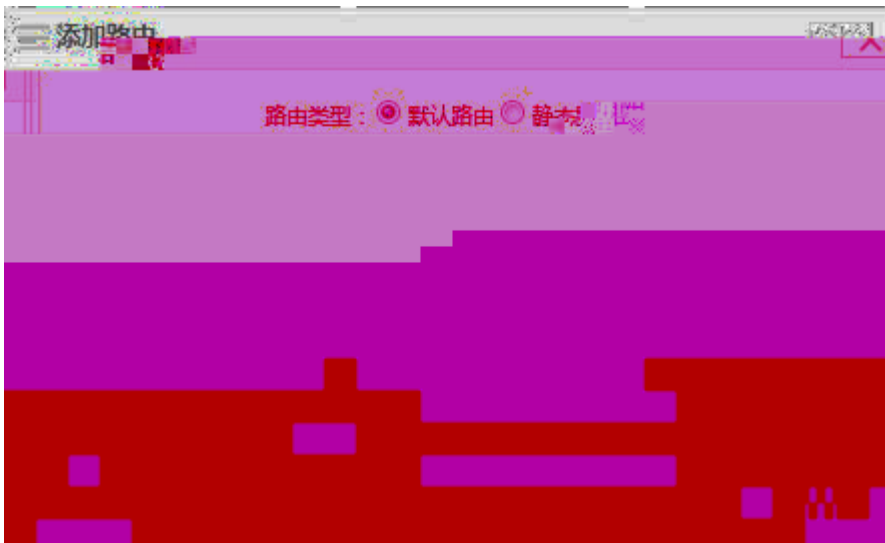
IP

IP

“ 1 ”

0.0.0.0

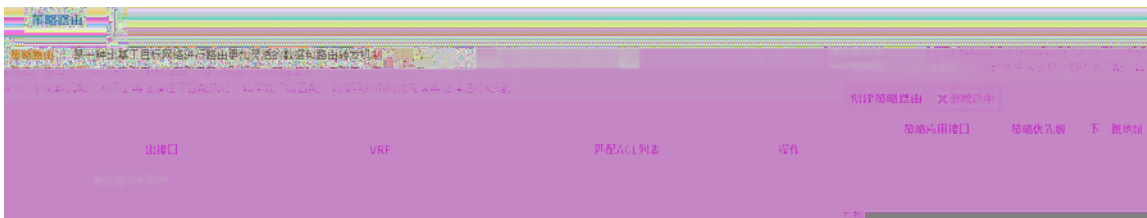
1-40



[ 0 · 0 ]

PBR Policy-Based Routing  
IP

1-41



ACL

ACL

IP

4G

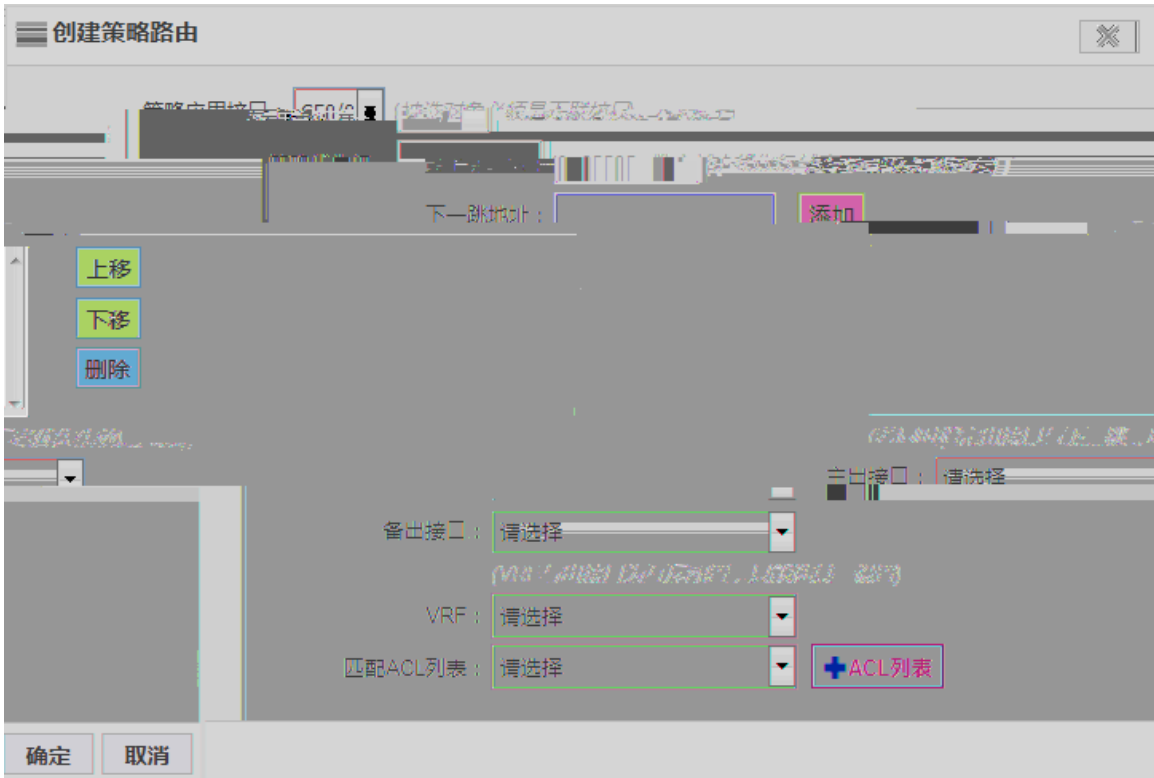
Serial

IP

IP

IP

1-42



596, ' ,

OSPF Open Shortest Path First Autonomous System

(Interior Gateway Protocol,IGP),

(RIP) OSPF

OSPF

OSPF

OSPF IP

Web

OSPF

ID

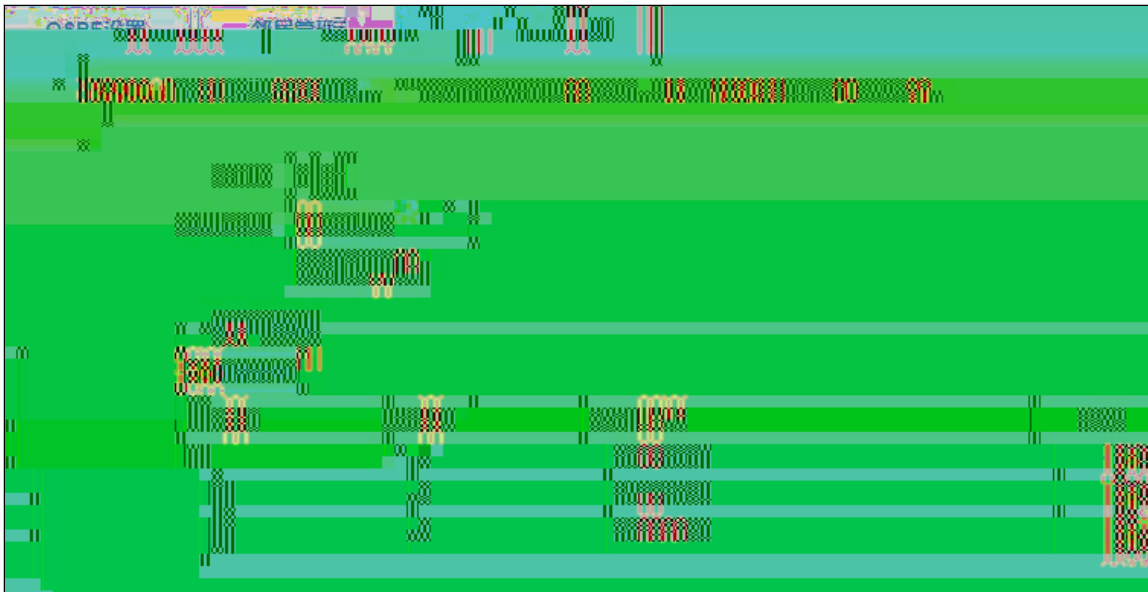
ID

OSPF

596, f ' ,

1-43





· 0 '54

1-45

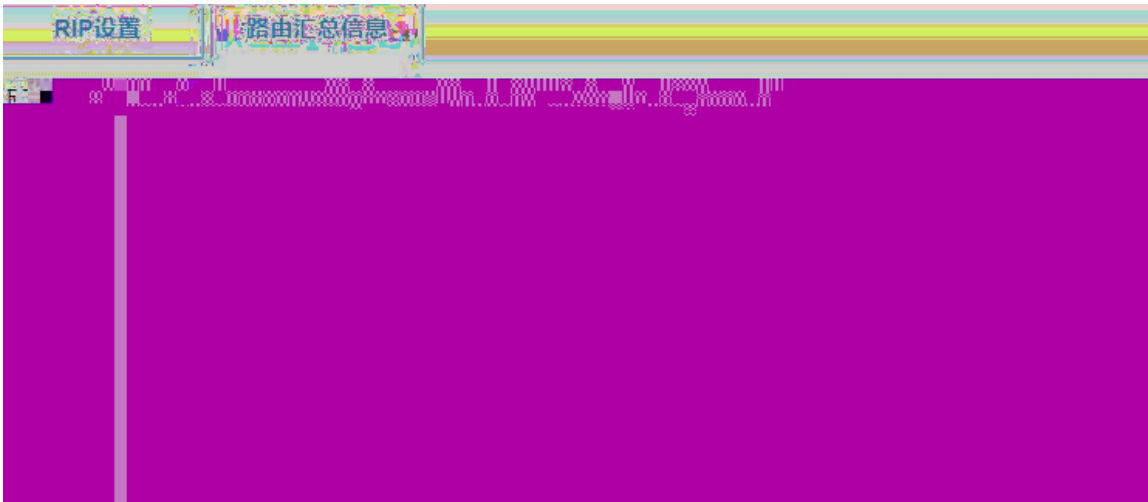


8 / 6 '

RIP(Routing information Protocol)

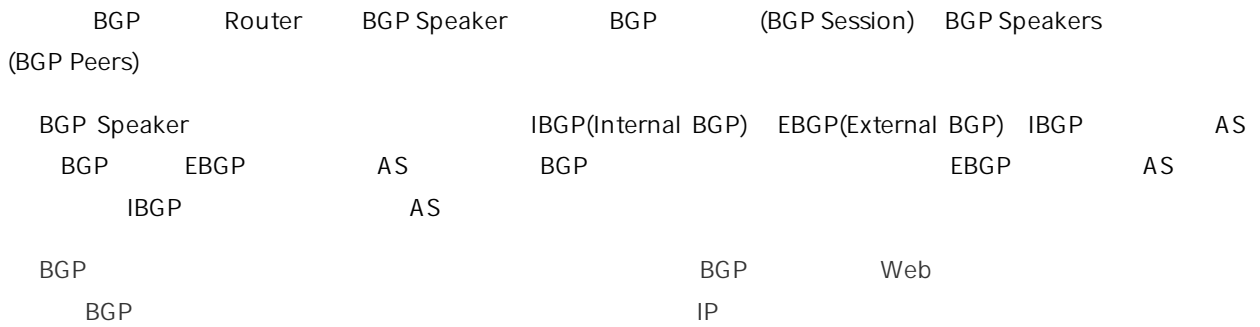
(Interior Gateway Protocol, IGP)



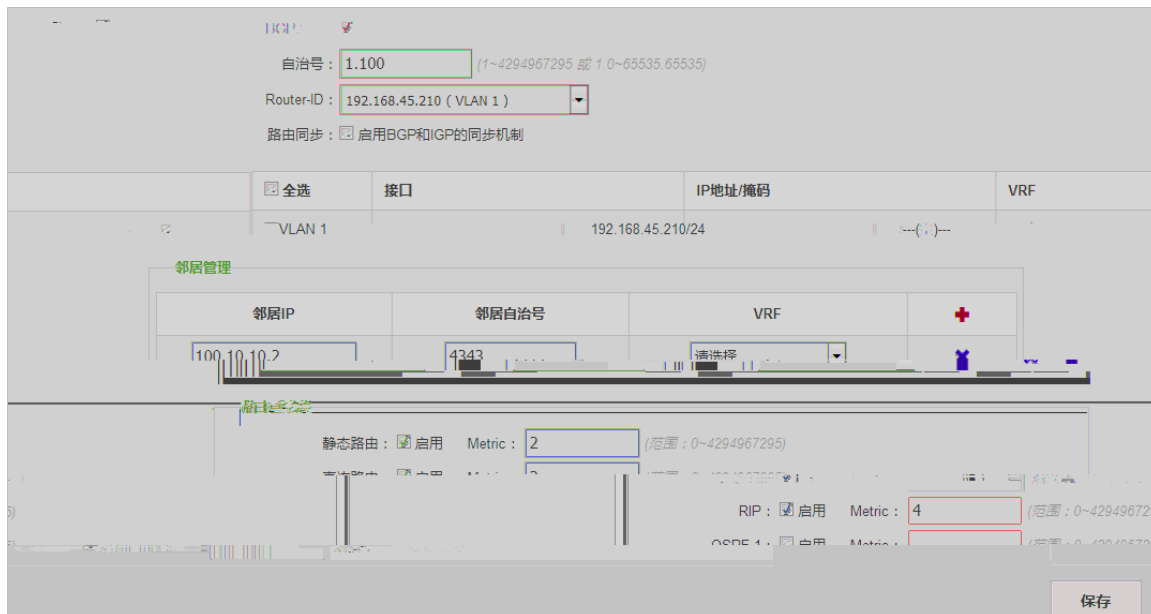


( - 6 ' )

BGP Border Gateway Protocol (Exterior Gateway Protocol EGP) (Autonomous Systems AS)



1-48



BGP

· Ò â F

OSPF : BGP OSPF BGP

OSPF BGP OSPF

OSPF Connected Static RIP

· Ò =

RIP OSPF BGP

1-49





VPDN

VPDN

VPDN

IP

VPDN

< 6 \* 4 § —

VPDN

VPDN

VPDN

VPN

PPTP L2TP

VPDN

IP

PPTP L2TP

VPDN

VPDN

1-51



< 6 \* 4 n a Â

VPDN

VPDN

1-52



- 8 +

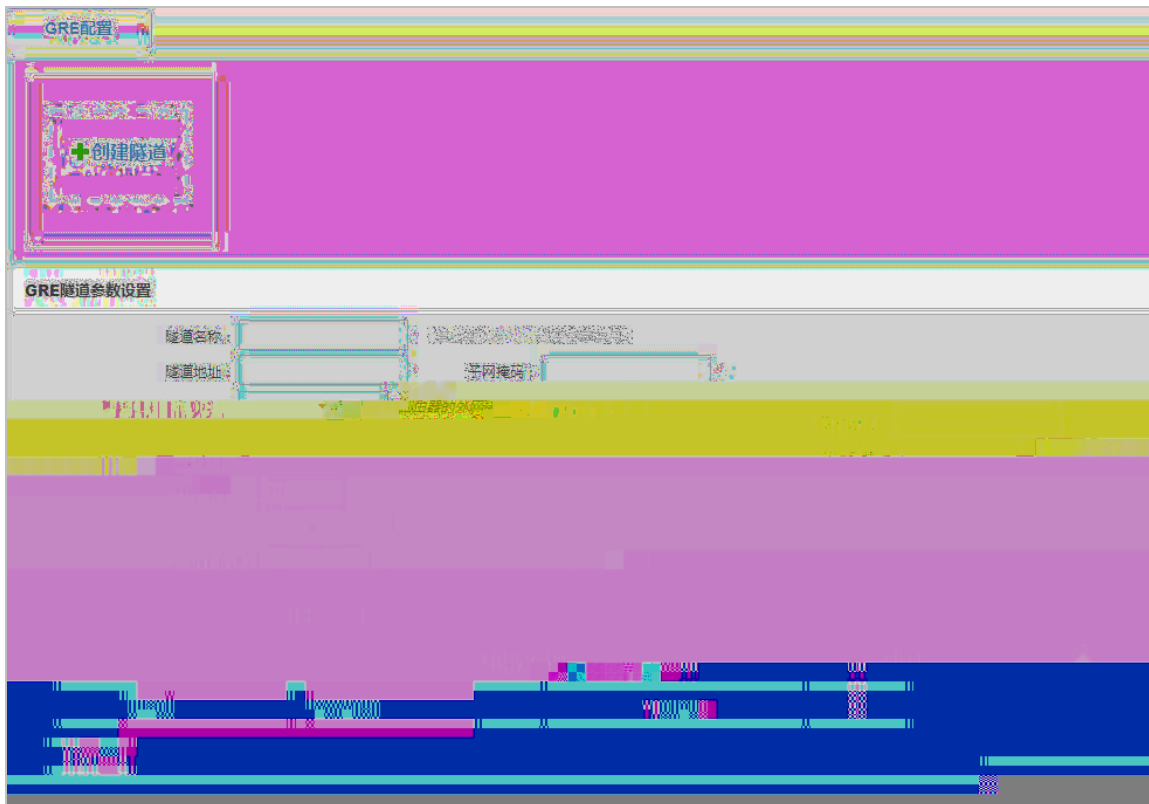
GRE

GRE

GRE

GRE

1-53



/69KI <64



/69KI μA

IPSec                  IPSec    MIB

1-54



/69KI n

### IPSec

IP                      IPSec                      IP                      6   IP

IPSec

VPN

IKE

IKE

DES 3DES AES SM1

SHA MD5

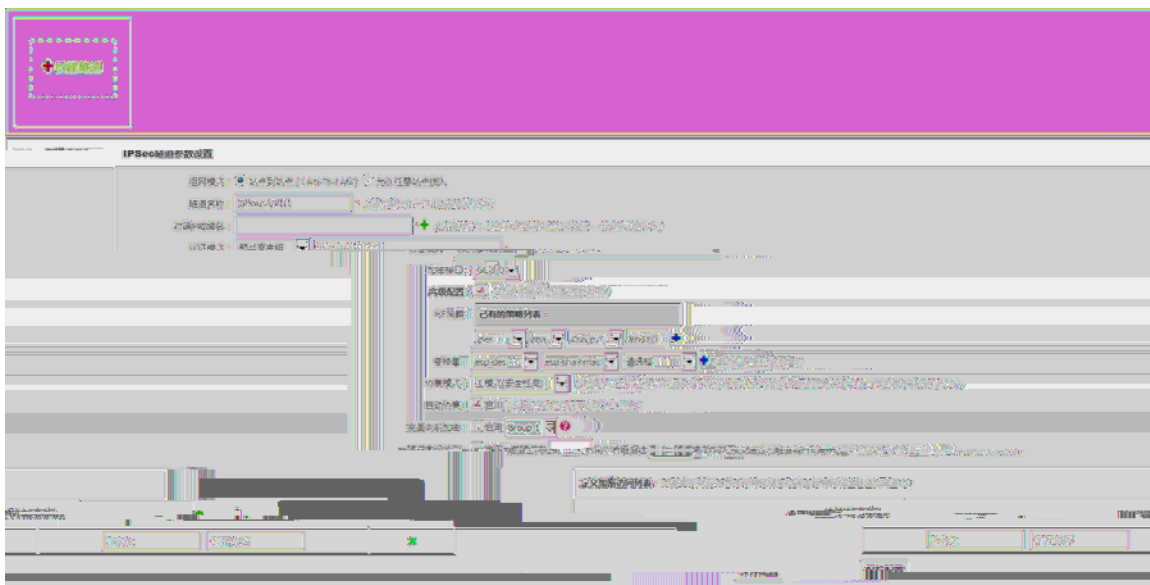
ESP-DES    ESP-3DES    ESP-3DES    ESP-SHA-HMAC

ESP-3DES    ESP-MD5-HMAC

ESP-DES

ESP-SHA-HMAC    ESP-DES    ESP-MD5-HMAC

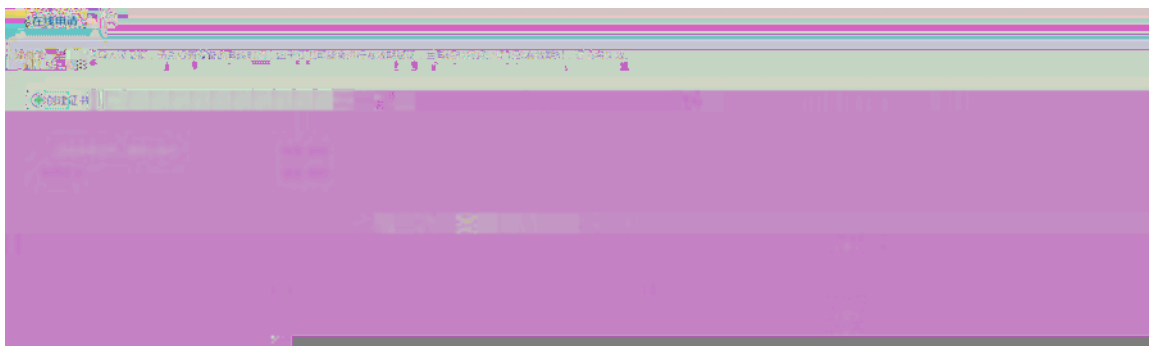
1-55



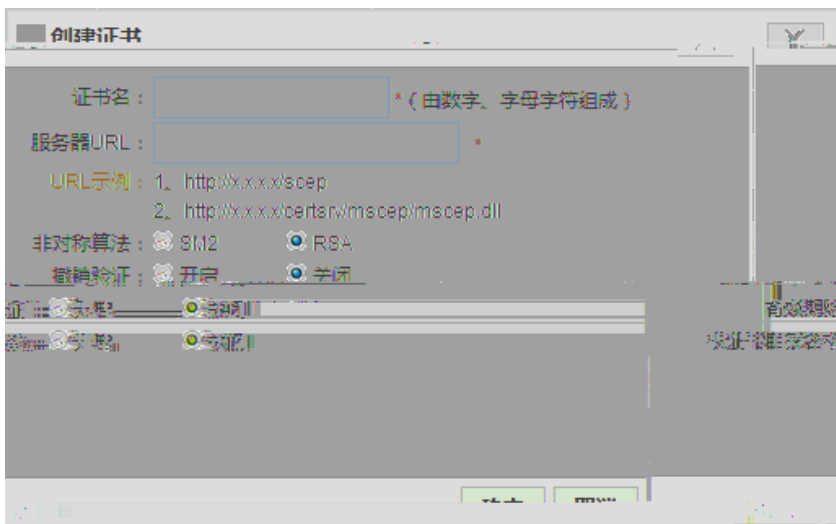
### 1.3.6 i/aÂ

§ Ž Ó {

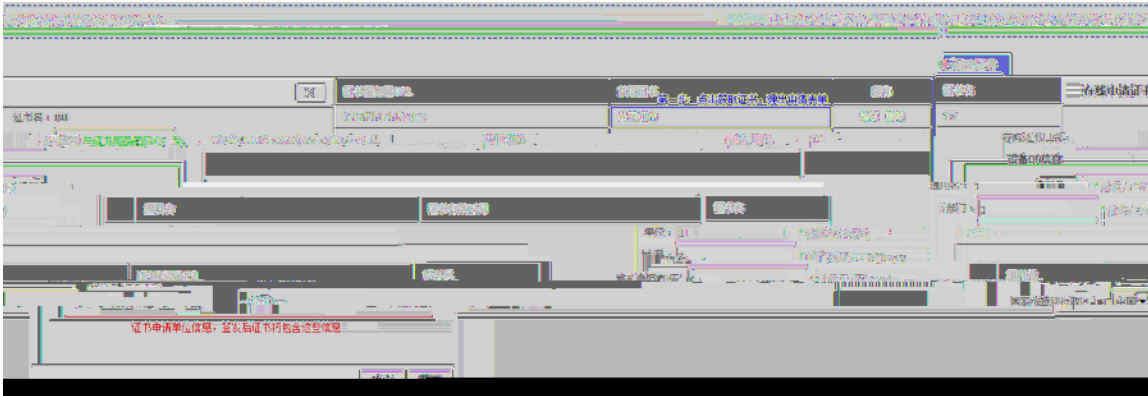
1-57



1-58



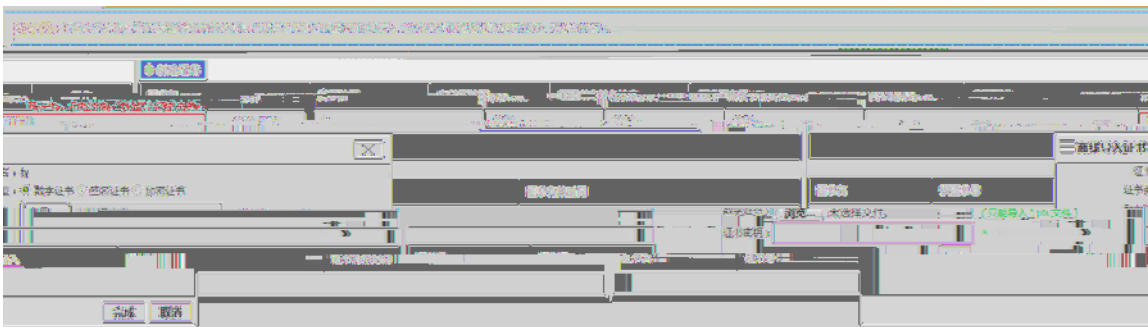
1-59



1-60

(Z, ')

1-60



1-61

**离线导入证书** [X]

证书名: ty

证书类型:  数字证书  签名证书  加密证书

设备DN信息

通用名:  \* (例如: 20\_14E)

部门:  \* (例如: Tac)

单位:  \* (例如: Ruijie)

城县:  \* (例如: Chengdu)

省(直辖市):  \* (例如: Sichuan)

国家(特别行政区): 中国 ▾

证书请求:  [导出]

证书ID:

根证书:  未选择文件. \*

设备证书:  未选择文件. \*

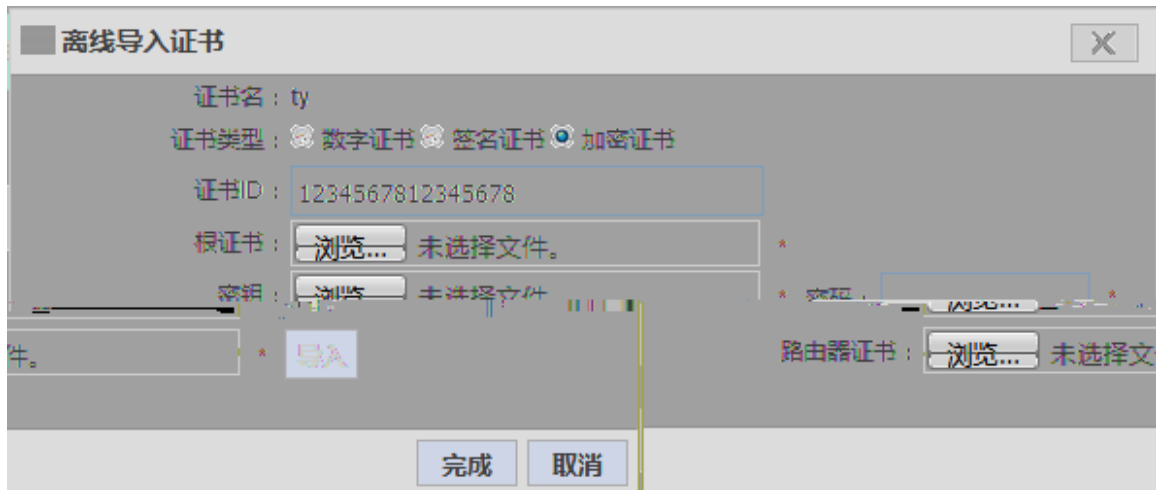
[完成] [取消]

1. DN " " " " "

2. " " PC

1-62

" " " " " " 3



### 1.3.7 '''

AAA Authentication Authorization and Accounting

AAA

\i RADIUS TACACS+ Local

\* ' AAA

b' AAA

---

Web

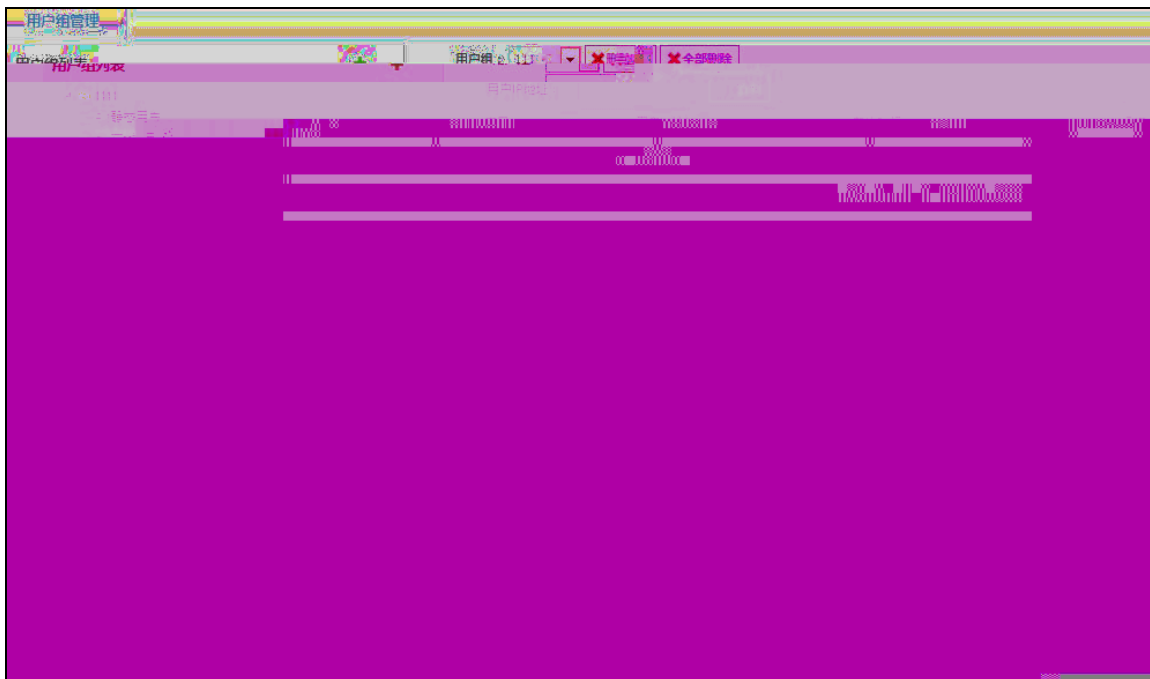
AAA

RADIUS

---

1-63





Ð Ð a Â

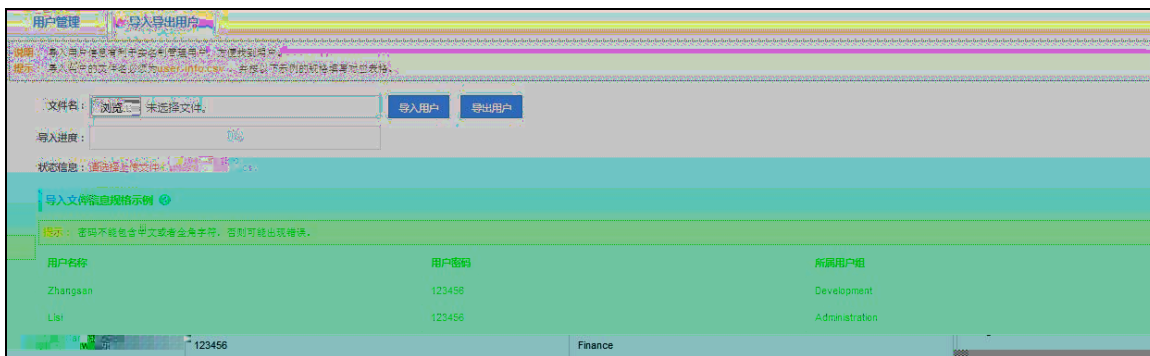
IP

1-65



Flash

1-66



= K H \ i

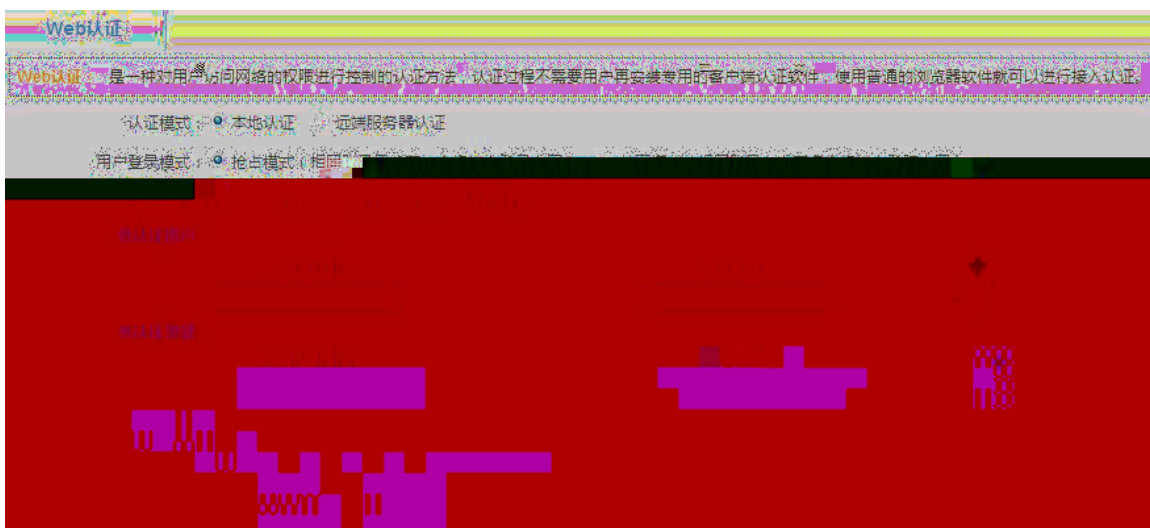
Web

Web

~ © \ i u

â O § — u

1-67





IP

IP

SMP

SMP

SNMP  
IP+MAC

SNMP

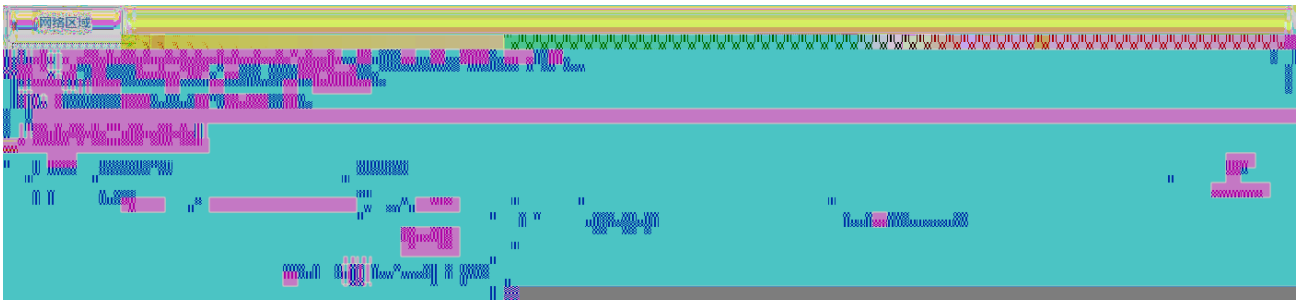
MAC

IP

→ ¾

IP

1-69



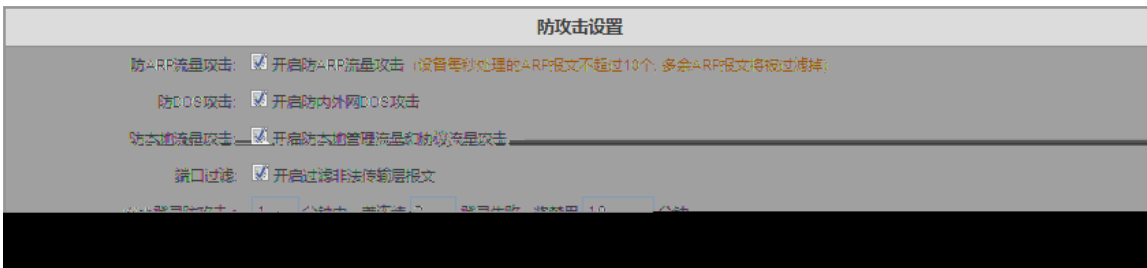
¾ k ( 0 ñ

### 1.3.9 配置

#### 配置

ARP		ARP		ARP	ARP
ARP	ARP	ARP		ARP	ARP
10					
DoS		DoS	DoS/DDoS		IP
		SYN Flood			
Web	1	3		Web	

1-72



/6 3') -

•4Æ /6 3') -

IP-MAC		IP-MAC	IP	MAC	IP-MAC
		ARP			IP-MAC
	IP-MAC				

1-73



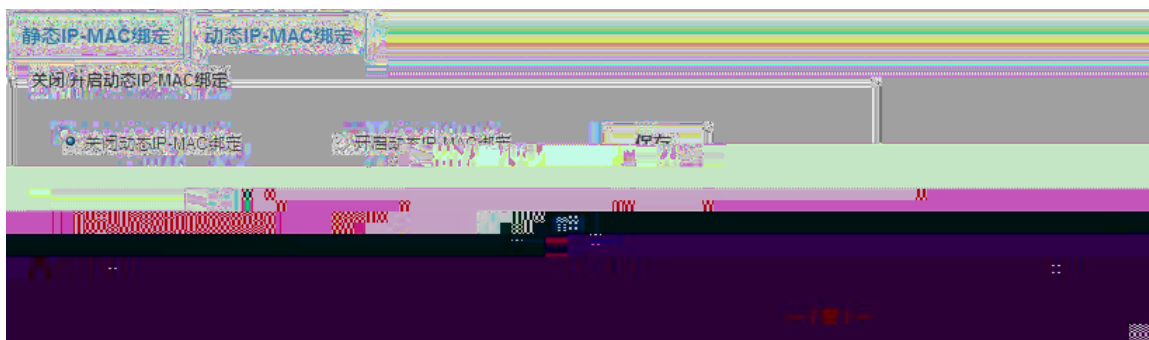
IP            MAC            IP  
MAC            IP            MAC

4Æ / 6 3 ' ) -

IP-MAC            ARP            IP-MAC

"            IP-MAC            "            IP-MAC

1-74

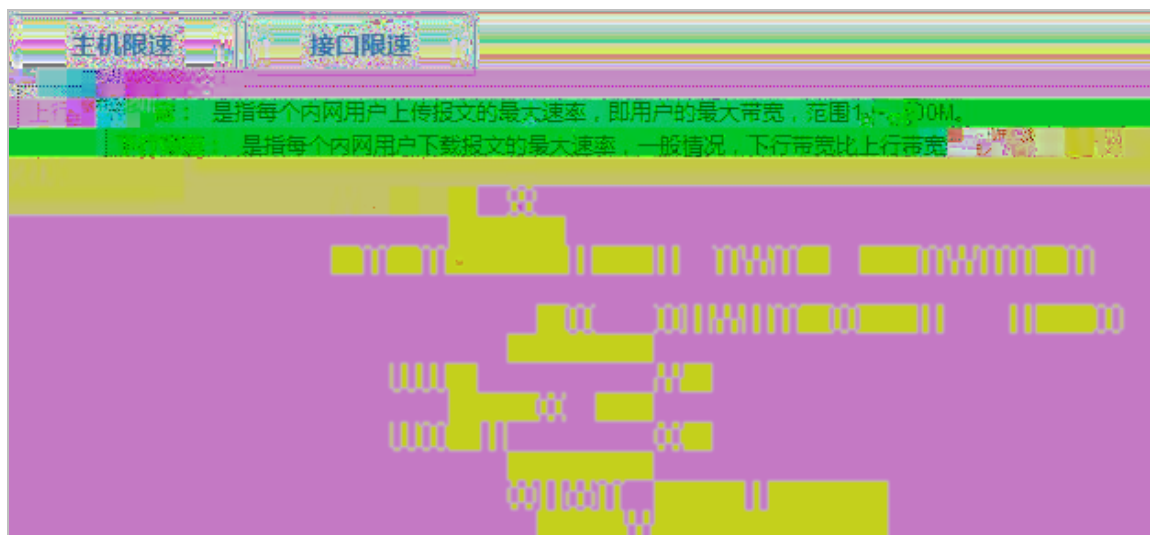


' ) 2 g K æ =

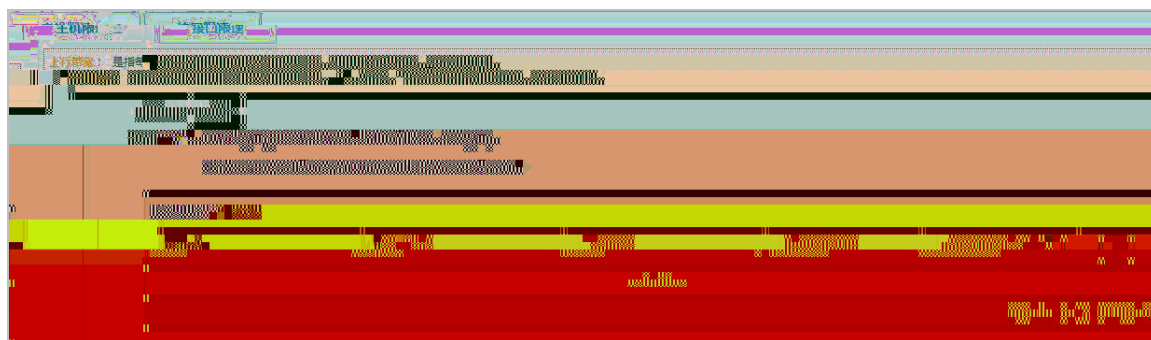
ACL

IP





1-79





Web

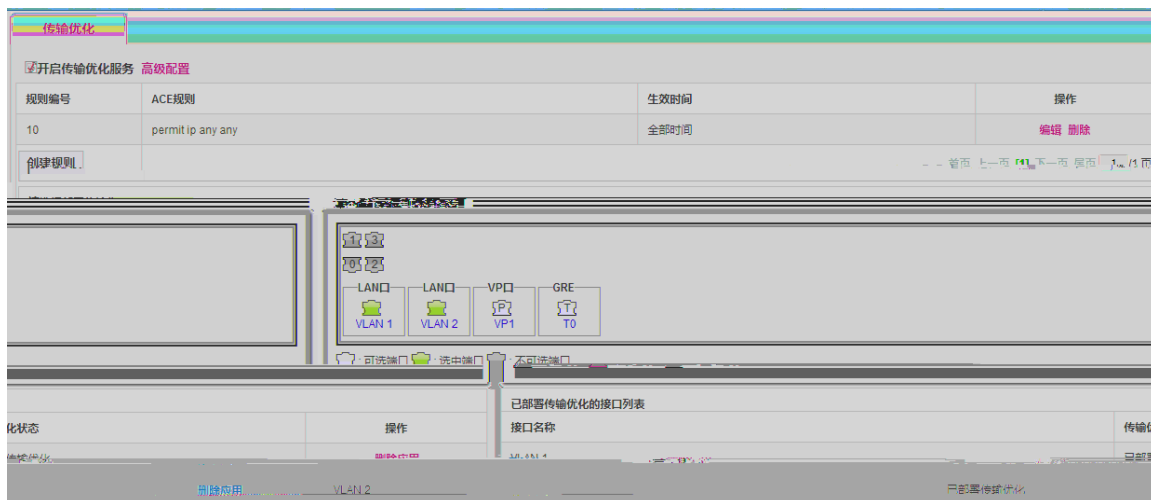
IP

/La û

IP



1-82



1-83



low-bandwidth-delay

10

120

9

Mss MSS 1420

0

1024

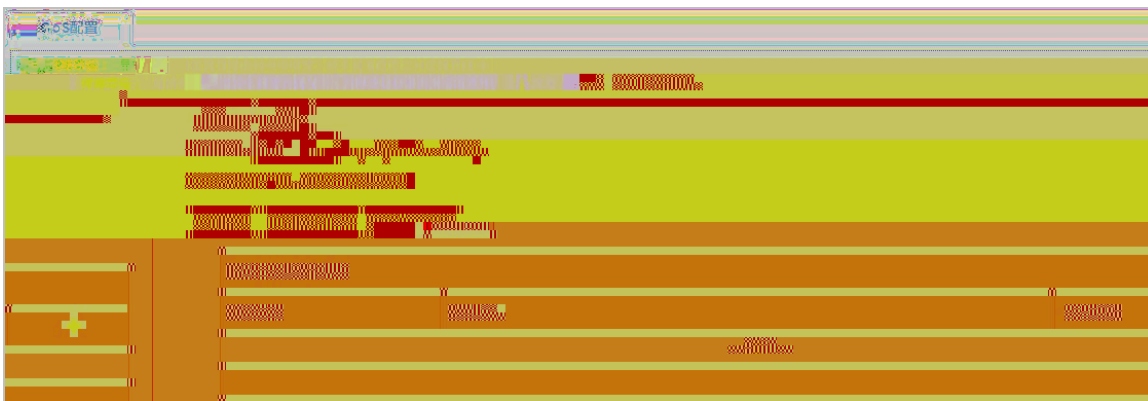
Sack

7 U 9 f ´

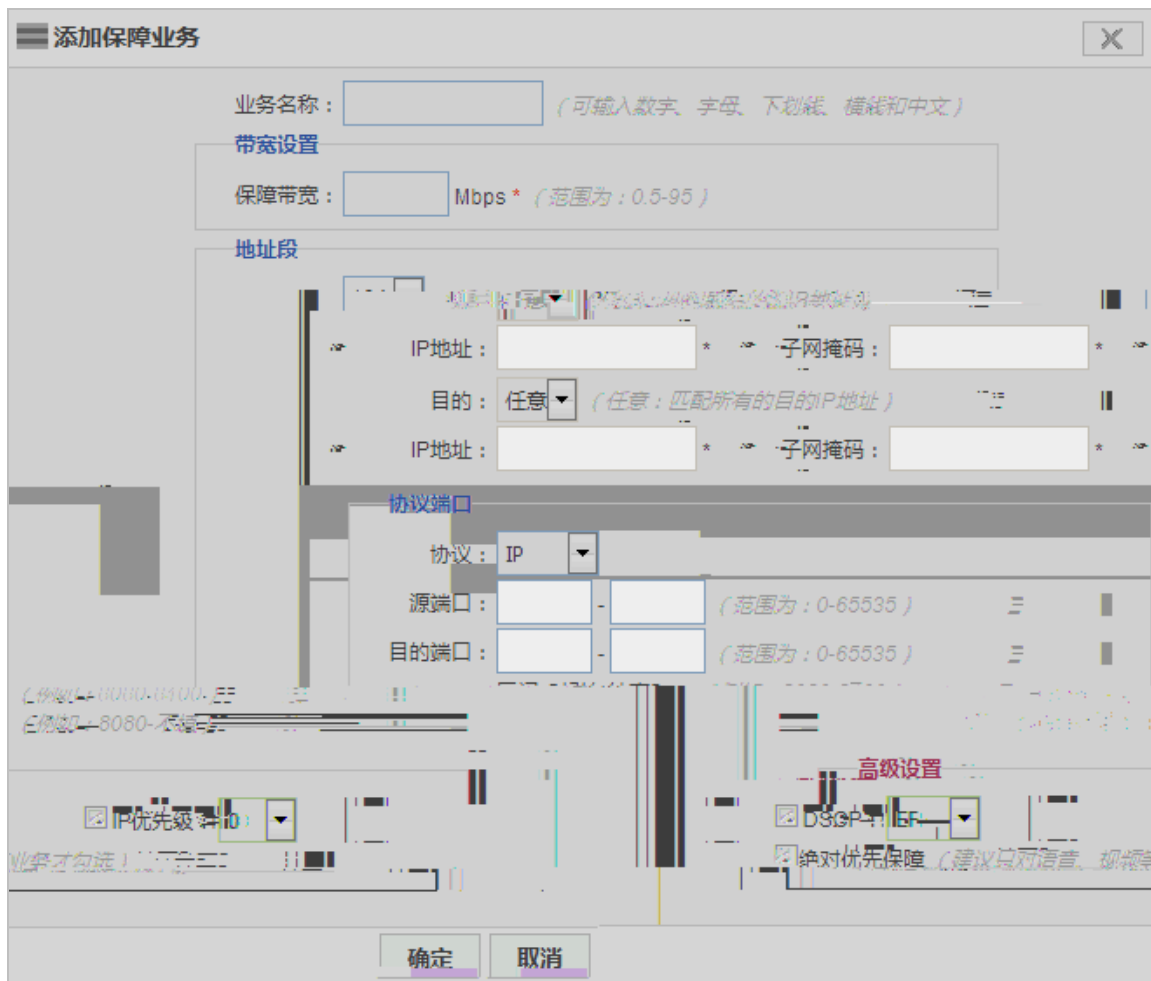
7 U 9 ^ O

QoS

1-84



1-85



Web

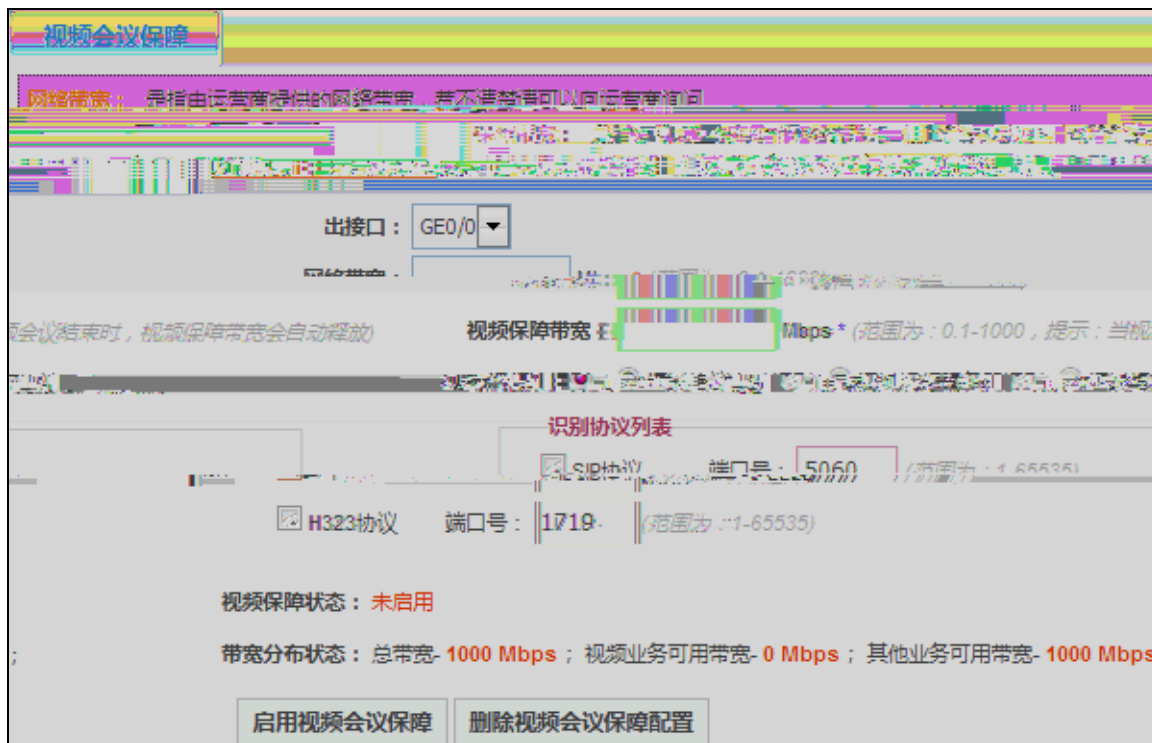
IP IP

Q—j`·m

x^O

1. H323 SIP
2. IP
3. IP

1-86



( H323 SIP) IP IP

3

€ D • m

x ^ O

Web

url

1-87

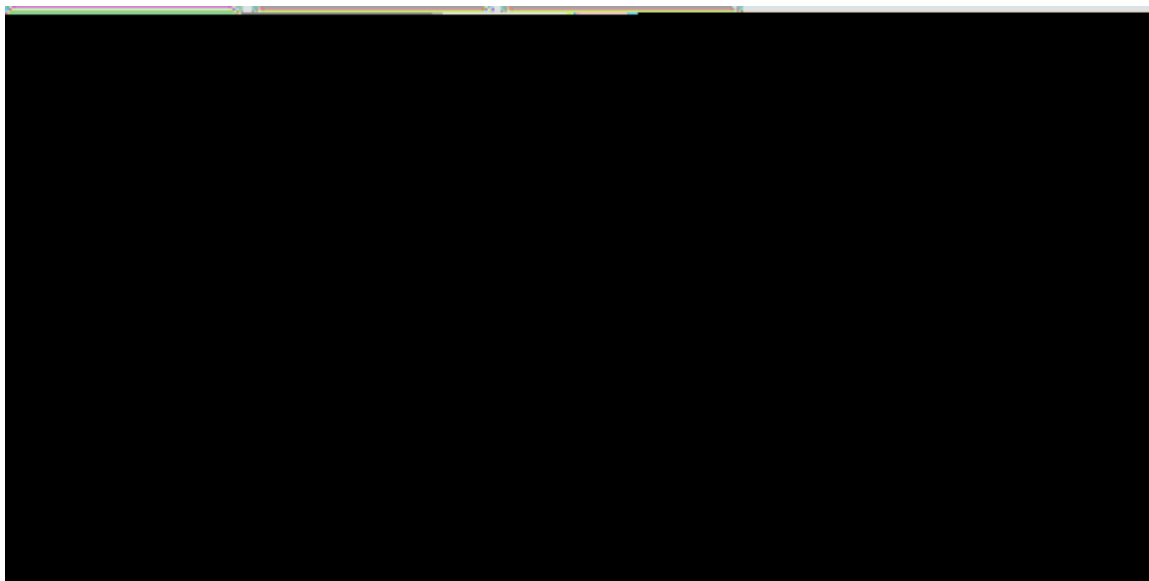


设备名称

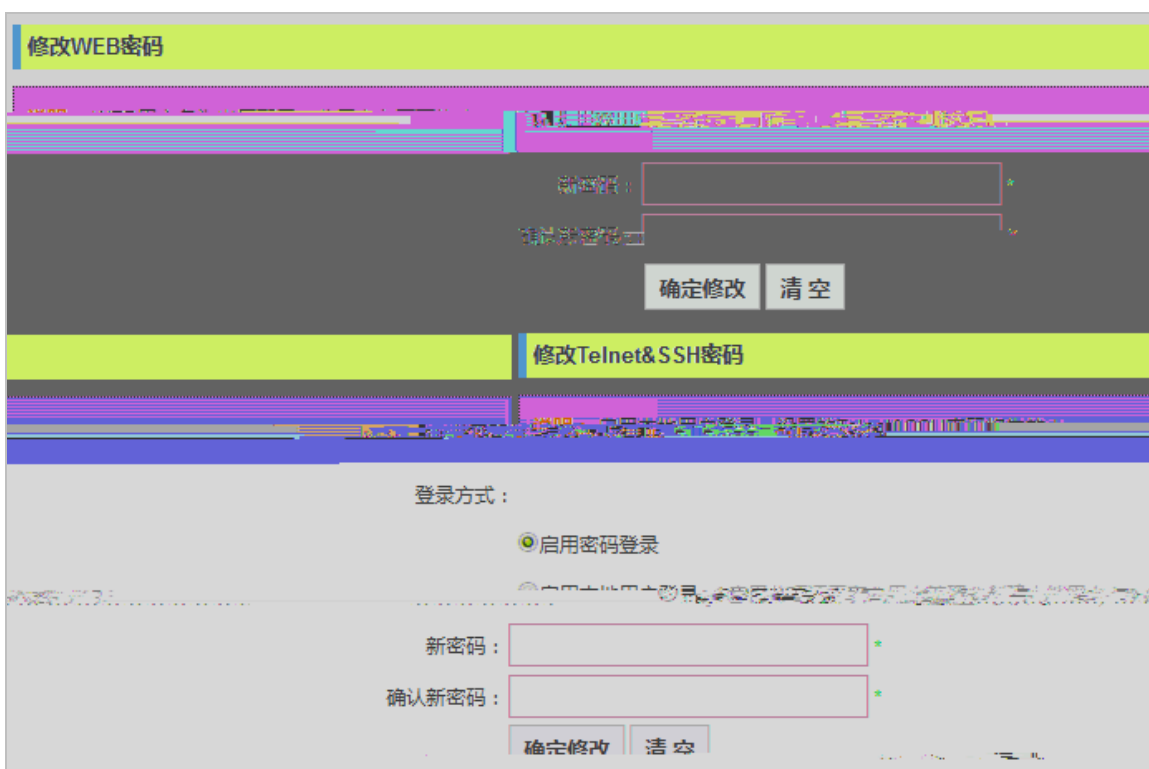
注意：请勿输入问号、空格、双引号字符！

设备名称 Rutie

确定修改



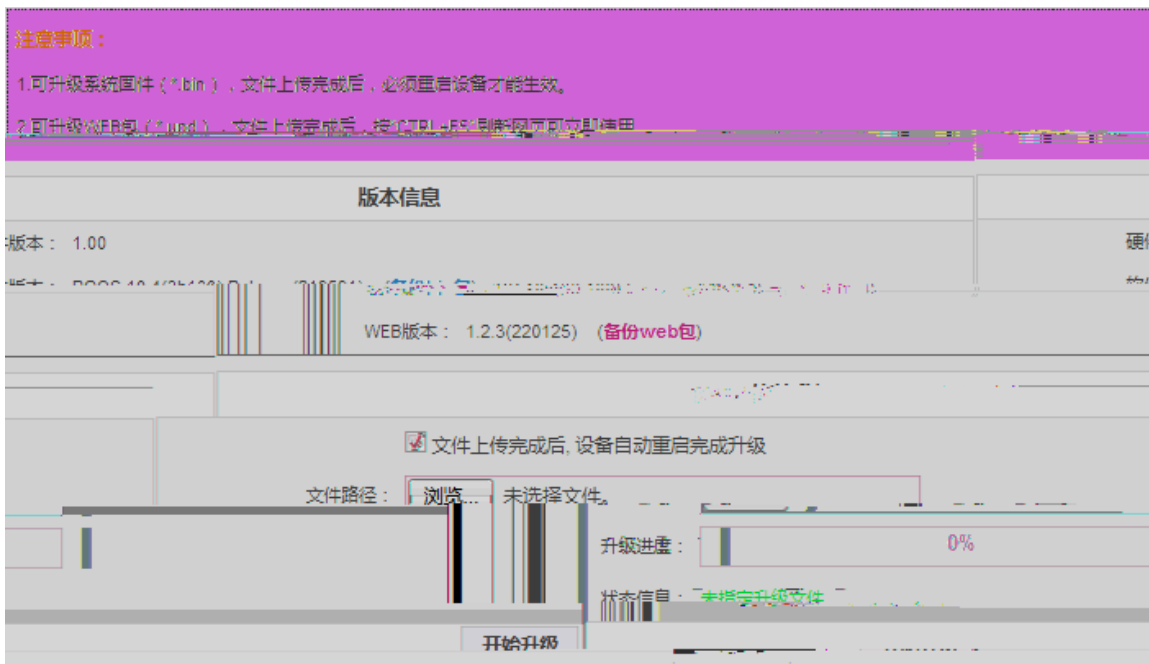
1-92



Ð Ð a Â

1-93



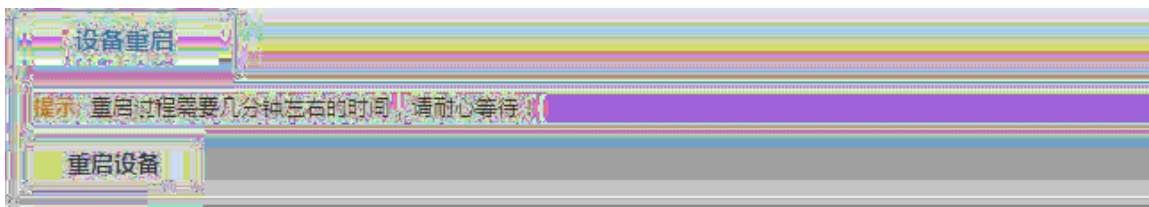


- ⚡ " " 50
- ⚡ " bin" Web " upd"
- ⚡ flash

f Ô n

" " 2  
 Web Web

1-96



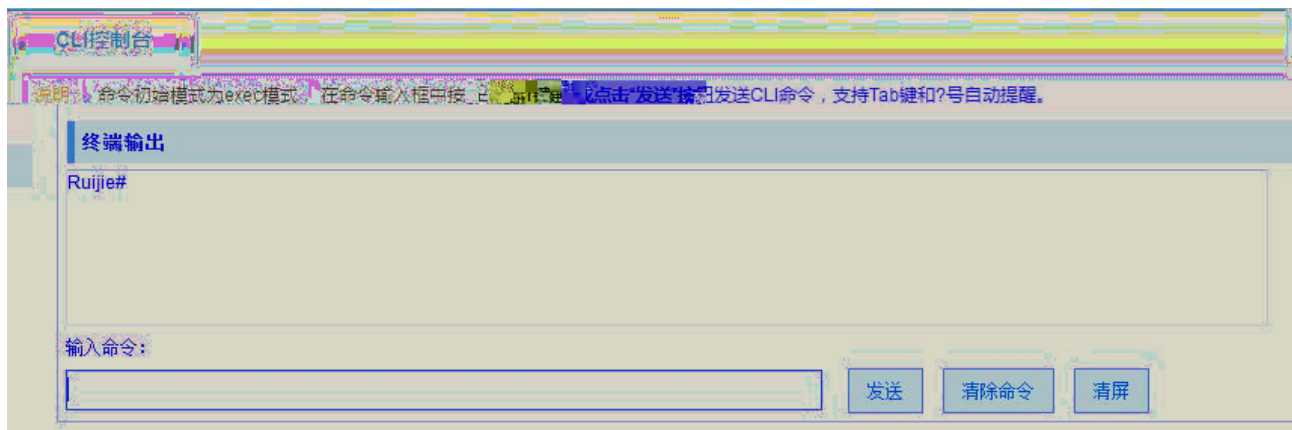
‘,’, P

" .text"

" config.text"



1-99



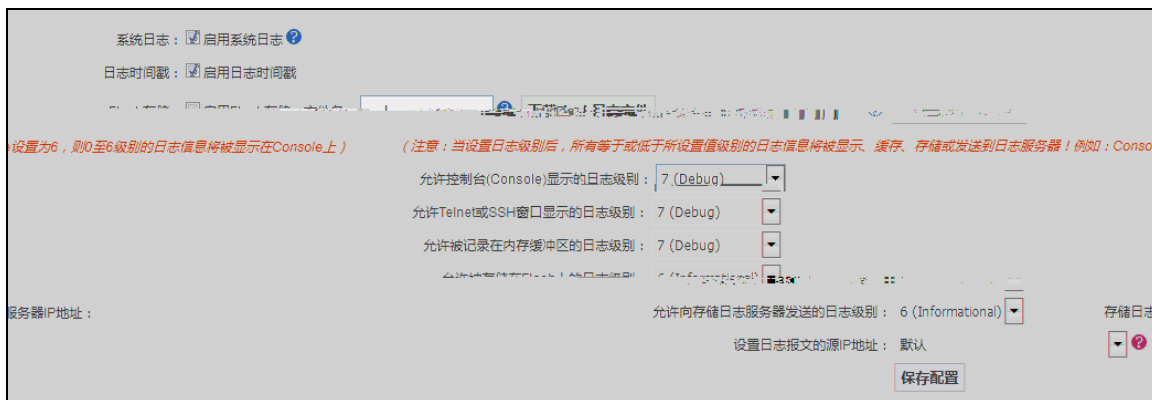
z 1 a Â

z 1 a Â

Flash

IP

1-100

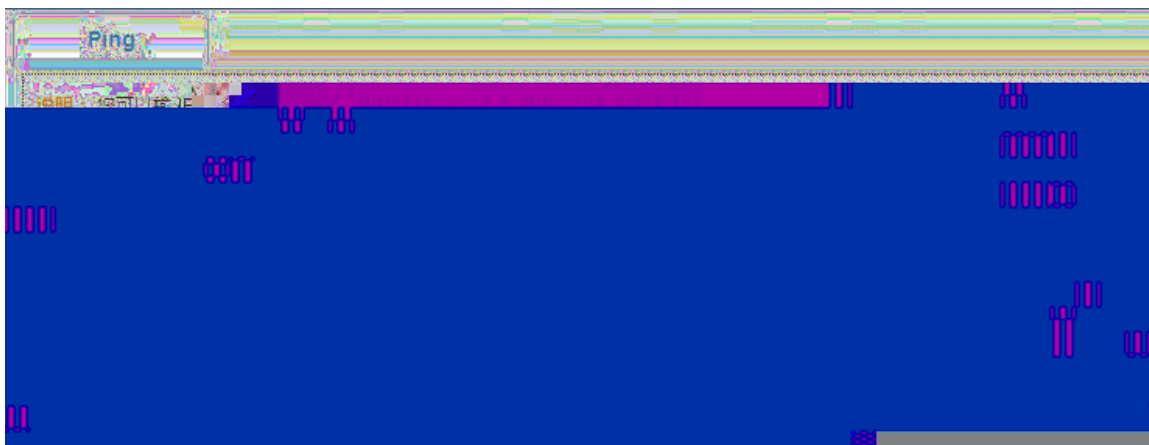


1-101



# 6 OTM

1-103

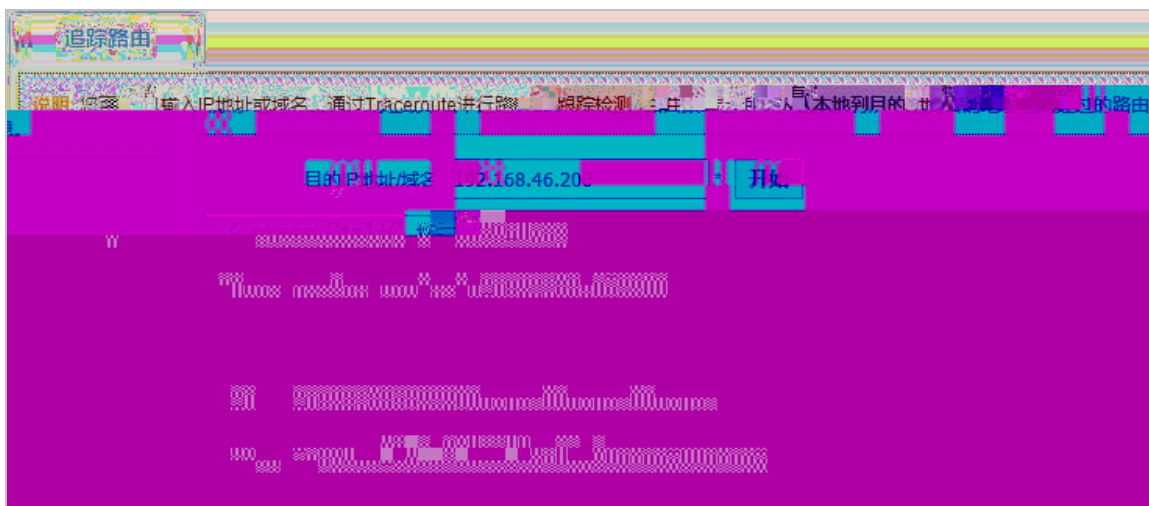


" " " "

# i¼·Ò

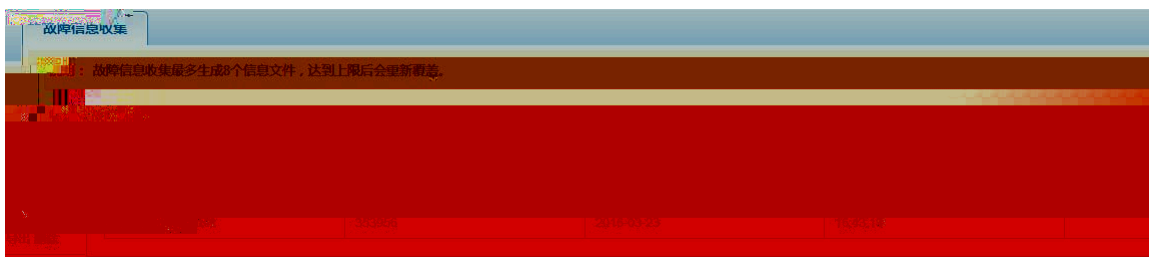
Traceroute

1-104



\ m W s

1-105

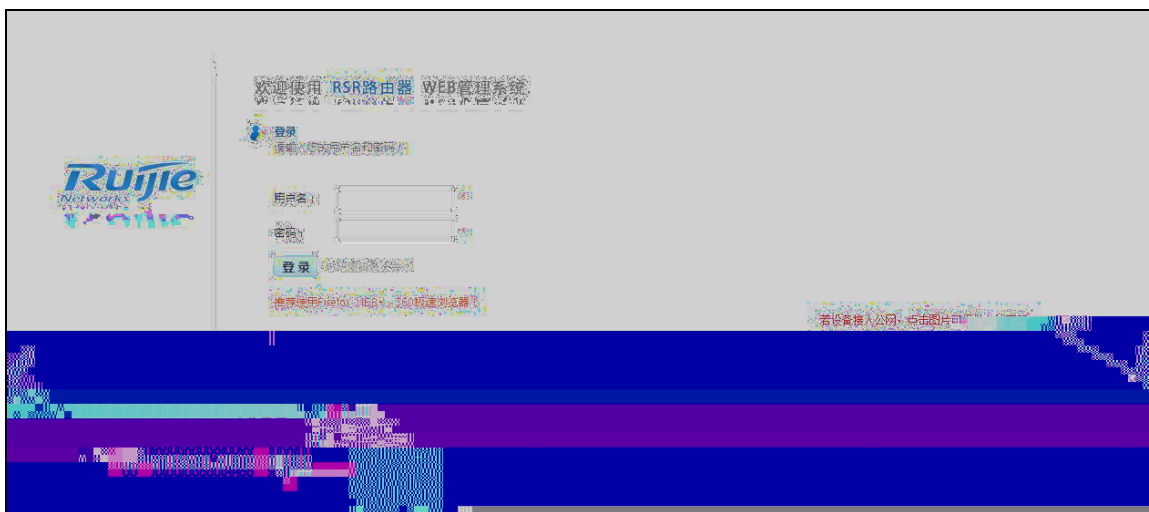


ê ± V

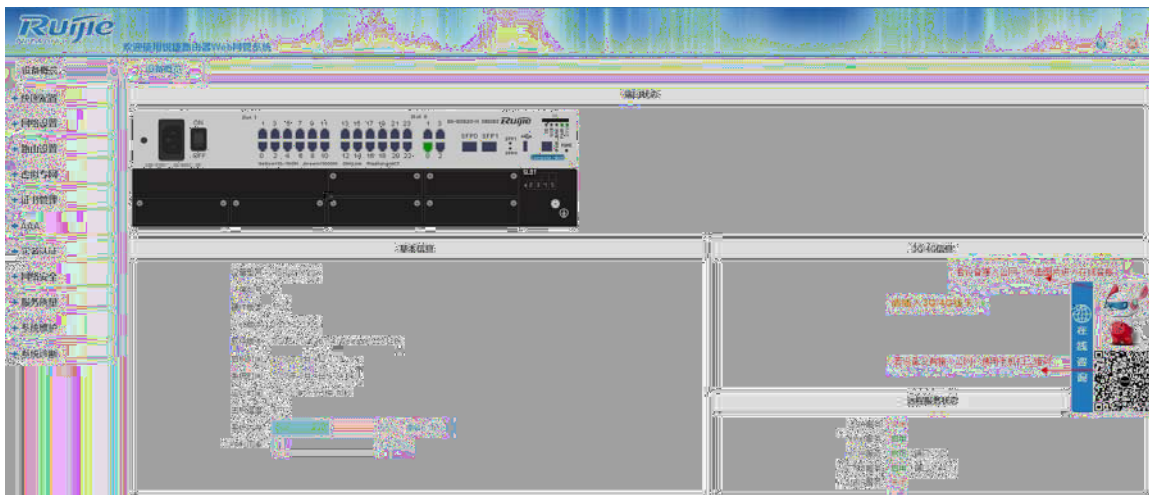
1.4.1 ^ d § Ž §

“ ” Web “ ”

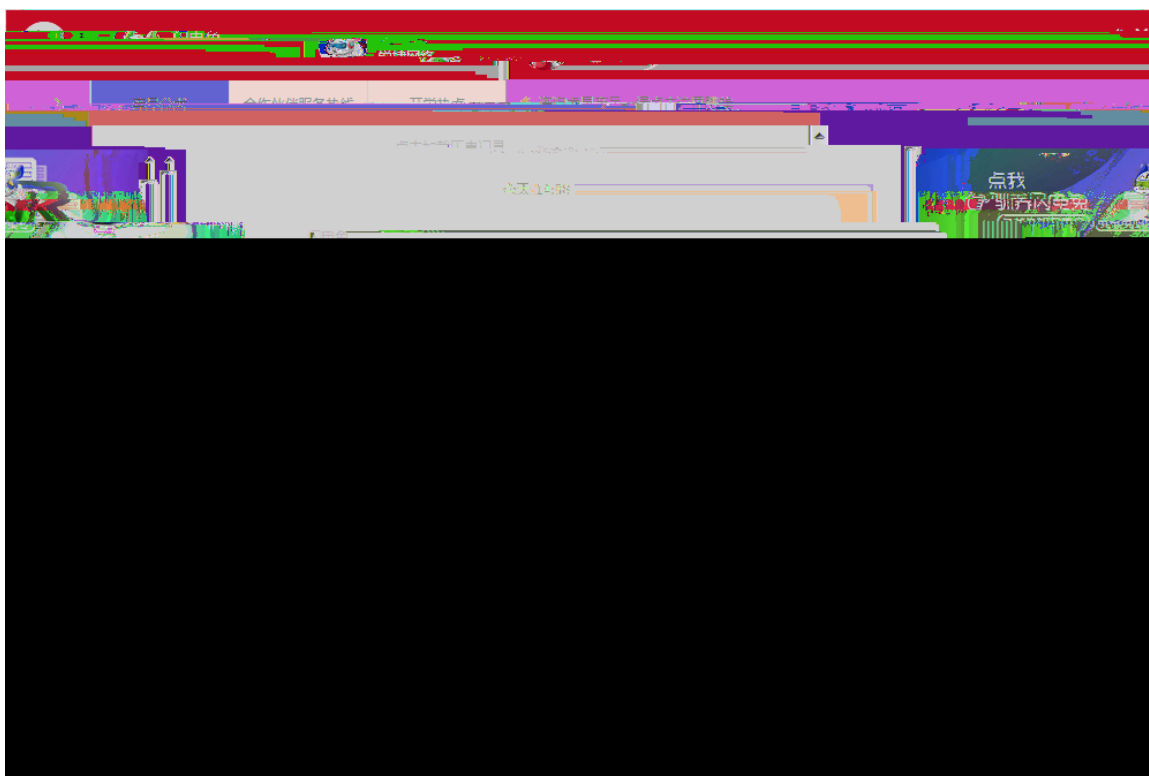
1-106 Web



1-107 Web



1-108



: 8:30-18:00

4008-111-000

Web

Web

•n Ó Â

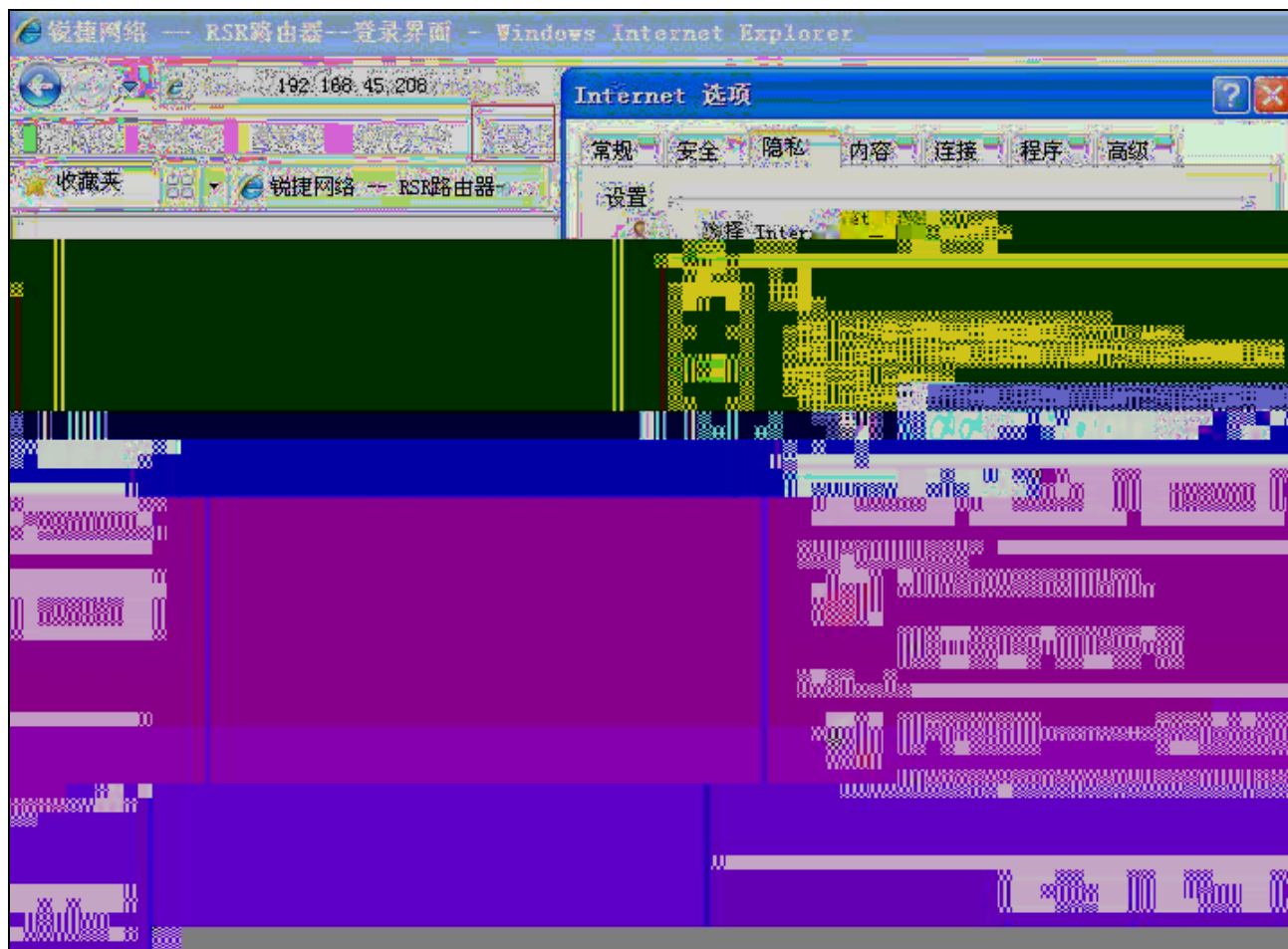
1.5.1 =KH\i á‘

Web

Web

IE

1-109 IE



“ ” “ ”

Web

1.5.2 =KHxDgK

1 PC Ping

Web

Web

1-110 Web

```
Ruijie(config)#show service
ssh-server      : disabled
telnet-server   : enabled
```

" disabled"      Web

" enable service Web-server all"

Web

2    PC    Ping

PC

IP