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RGOS®

RGNOS®



锐捷®

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8:30 6 “ ”

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■ <http://support.ruijie.com.cn>

■ service@ruijie.com.cn

RGOS[®]10.4 (2b12)

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-
-

1.

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[ ] [ ]  
{ x | y | ... }  
[ x | y | ... ]  
//
```

2.

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3.

■

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■



WEB

WEB

1. WEB

2. WEB

1 WEB

WEB IE III
WEB WEB WEB IIIWEB WEB
WEB IEIII WEB

2 WEB

2.1

WEB III





1

f L

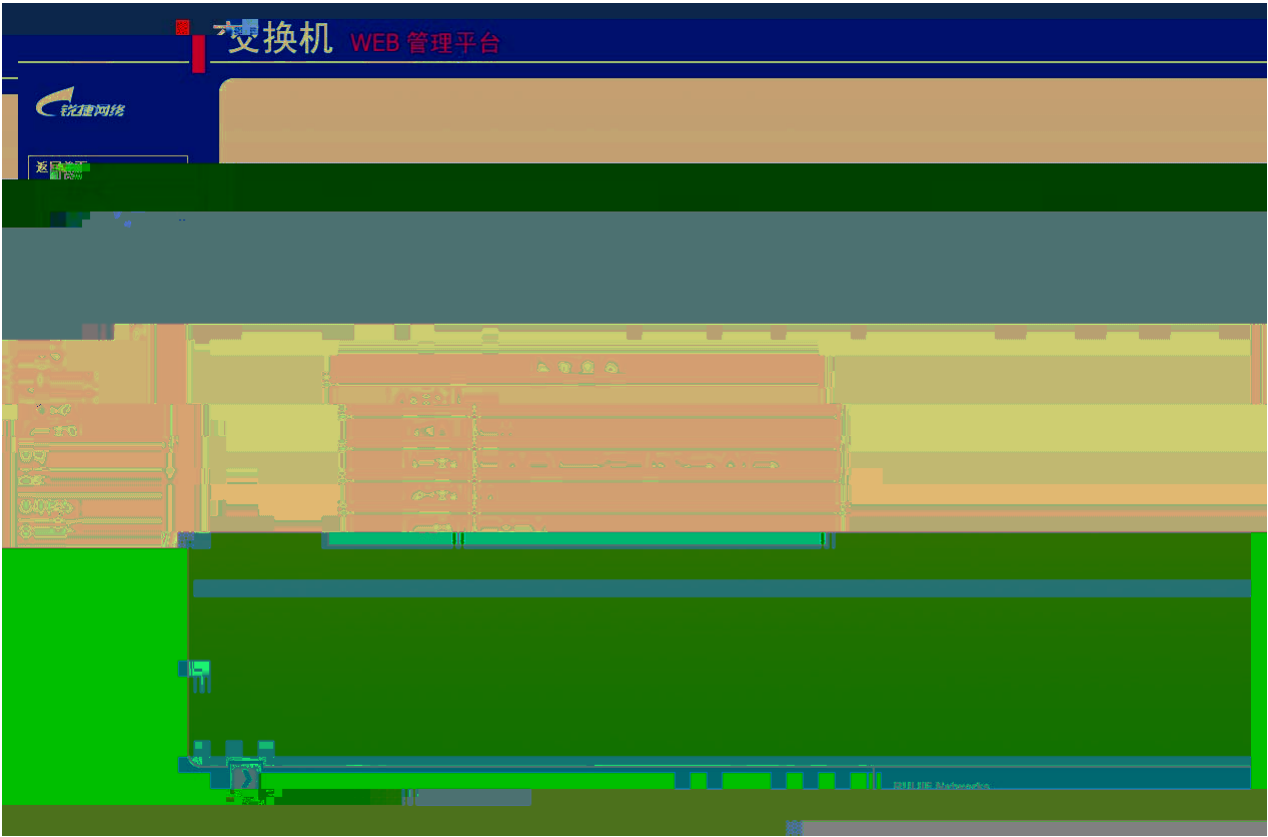
q

III



2

WEB



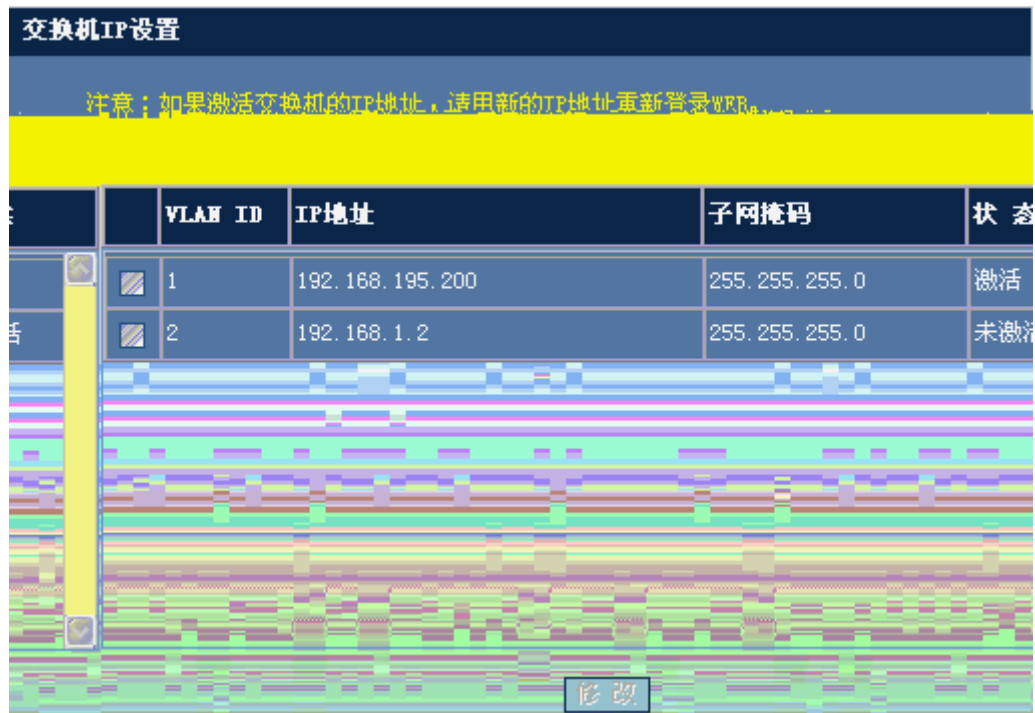
3 WEB

	WEB		Enable
	enable	III	

2.2

2.2.1 IP

I IP L III



4 IP

ip f L



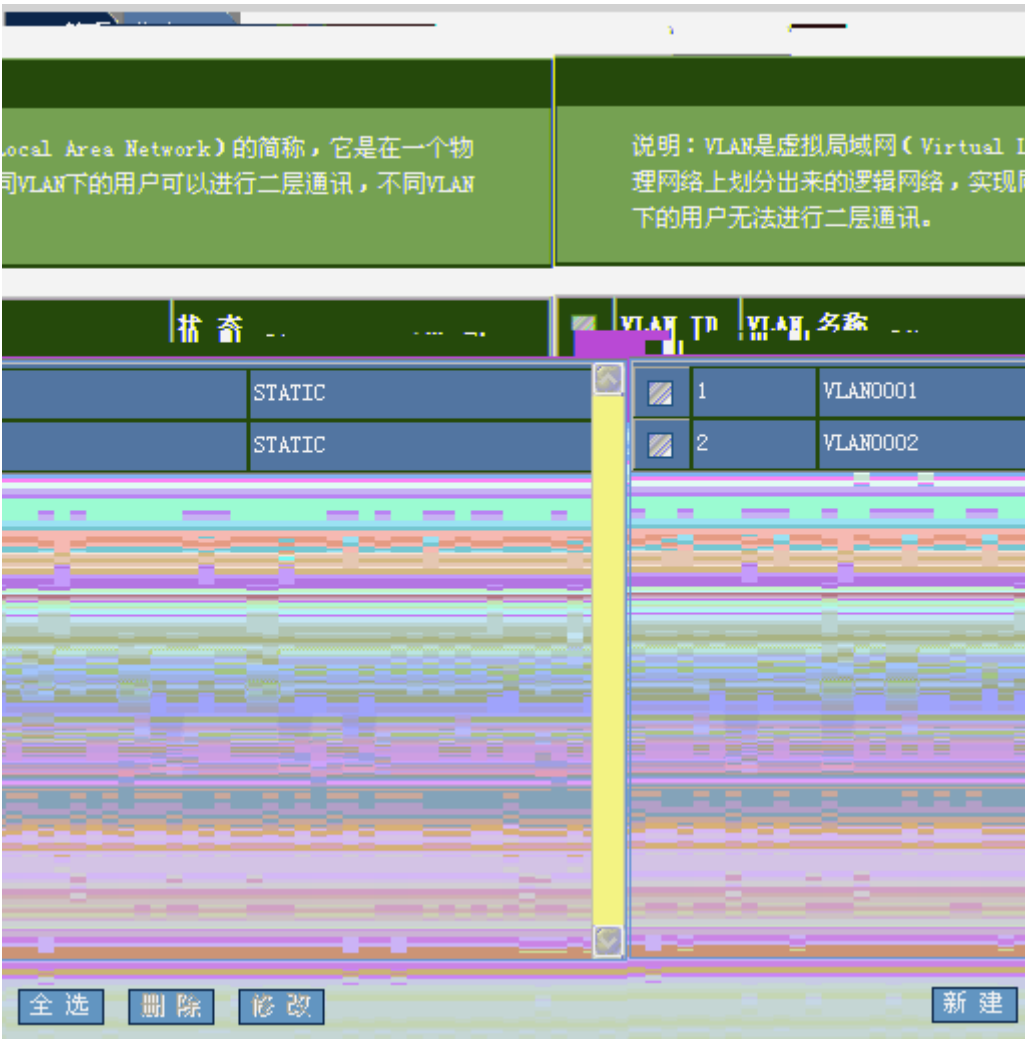
5 IP

IP f L III

2.2.2 VLAN

I VLAN L III

1 VLAN



6 VLAN

VLAN III 4 4 VLAN

VLAN III

I L

VLAN管理 -- 网页对话框

VLAN ID :

(1-4094)

VLAN 名称 :

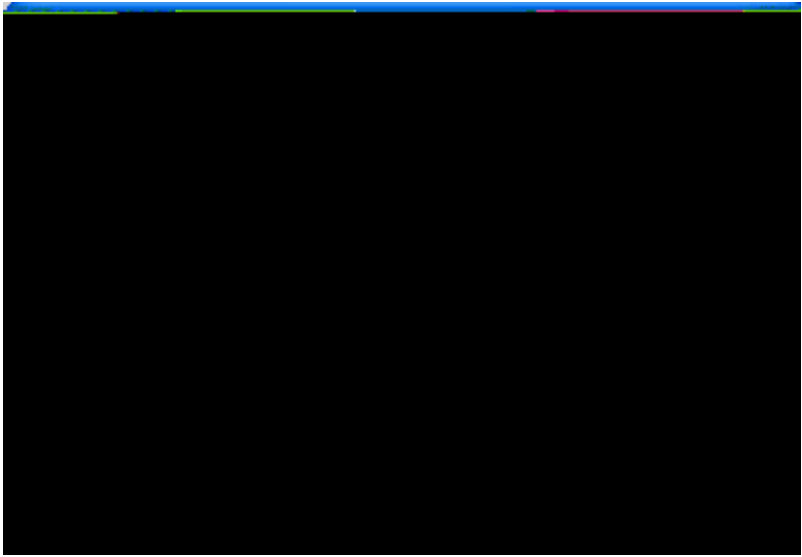
(可选)

保存

取消

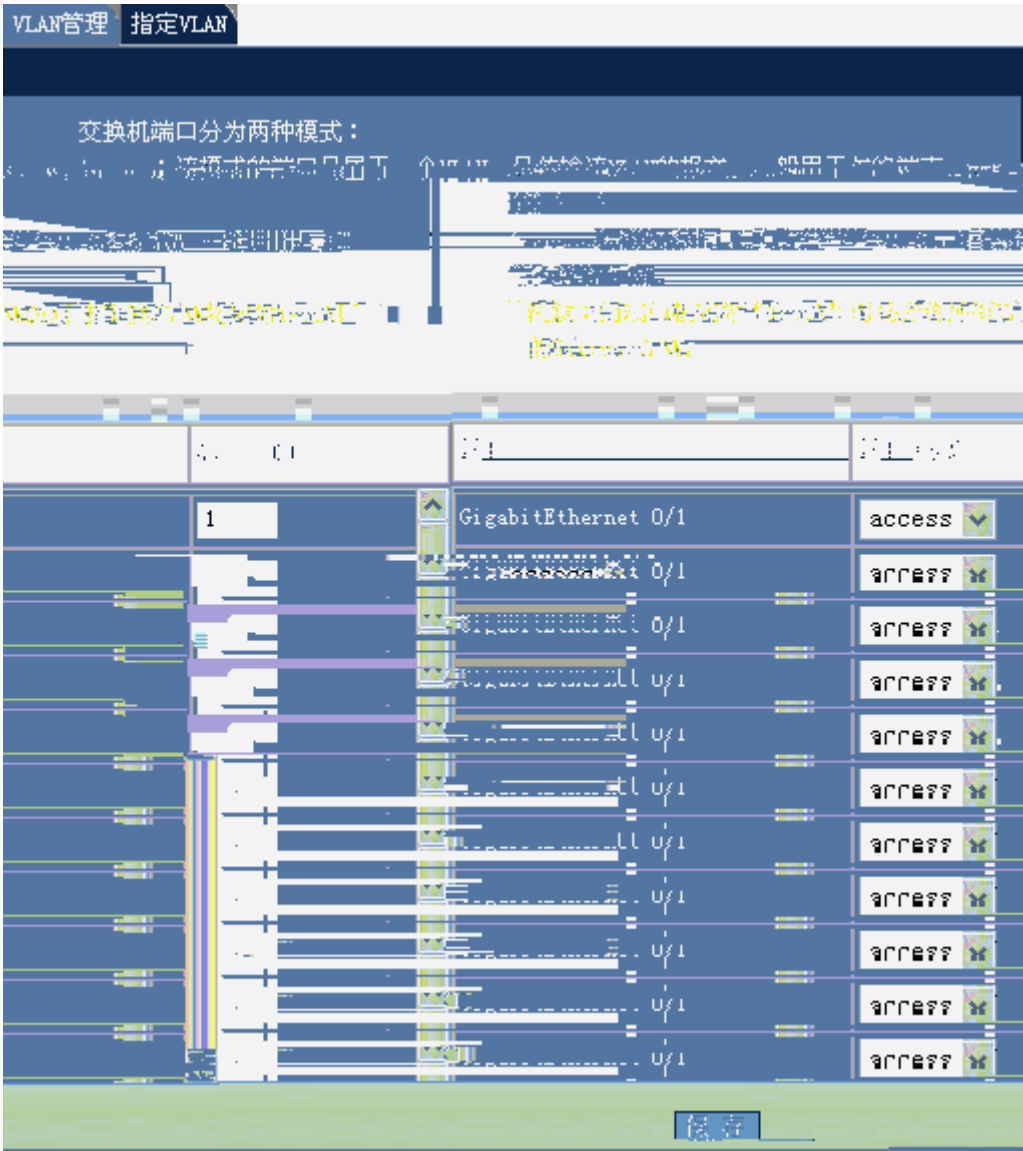
7 VLAN

VLAN ID	VLAN 名称	III
VLAN	VLAN	III
	VLAN	III
	VLAN	III



8 VLAN

VLAN ID	VLAN 名称	III
VLAN	VLAN	III
2	VLAN	III



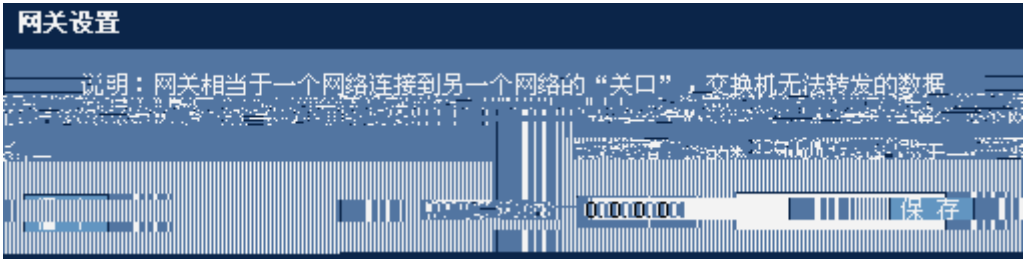
9 VLAN

VLAN ID 1 2

III

2.2.3

I L III



10

IP IP 1 1 III

2.2.4

1 1 III



11

III 1 2 III

2.2.5

1 2 III

端口限速设置

注意：不限速的端口，保持对应文本框为空（1byte=8bit）。S2900系列设备不支持对端口输入速率限制的设置。

端口	输出速率限制 (312-1000000 KBit/s)	输入速率限制 (312-1000000 KBit/s)
GigabitEthernet 0/1		
GigabitEthernet 0/2		
GigabitEthernet 0/3		
GigabitEthernet 0/4		
GigabitEthernet 0/5		
GigabitEthernet 0/6		
GigabitEthernet 0/7		
GigabitEthernet 0/8		
GigabitEthernet 0/9		
GigabitEthernet 0/10		
GigabitEthernet 0/11		
GigabitEthernet 0/12		
GigabitEthernet 0/13		
GigabitEthernet 0/14		
GigabitEthernet 0/15		

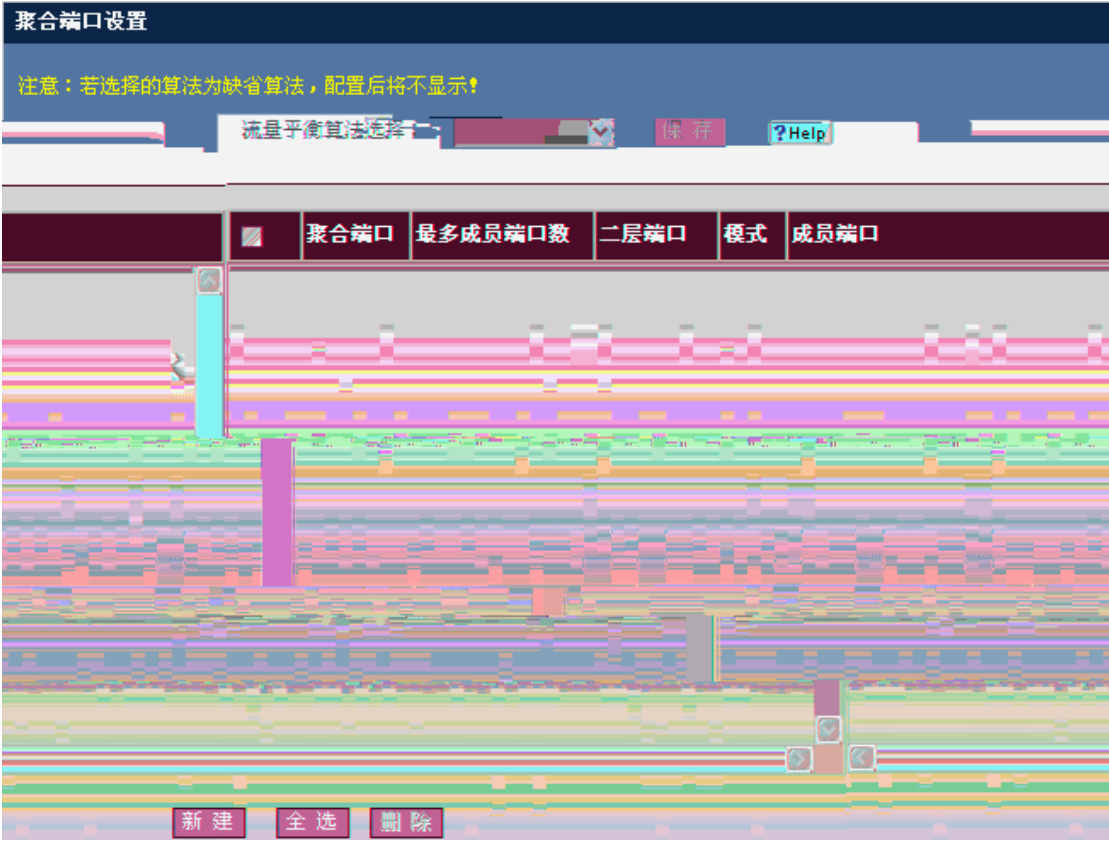
保 存

取消全部限速

1 2 III 1 2 III

2.2.6

I L III



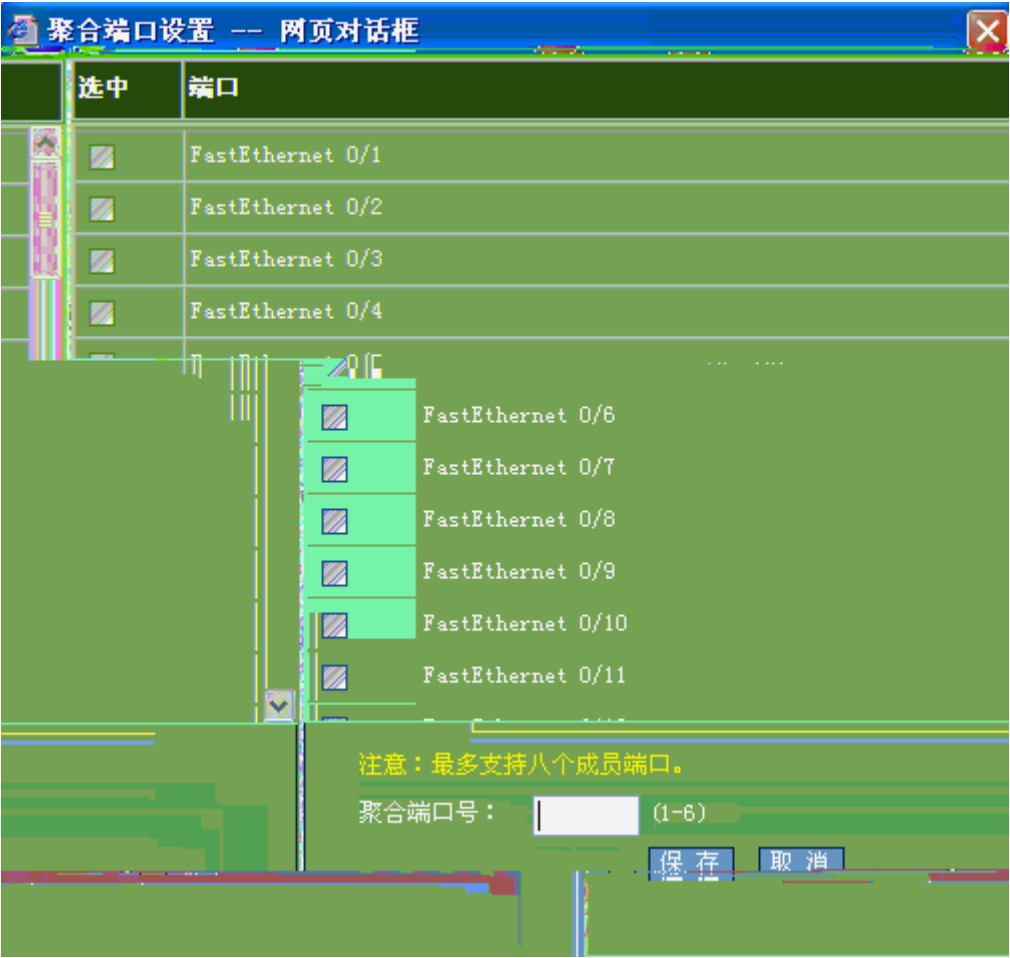
13

1

I L III

2

I L



14

I L

III

3

I L

III

2.2.7

Ò f ä

端口设置

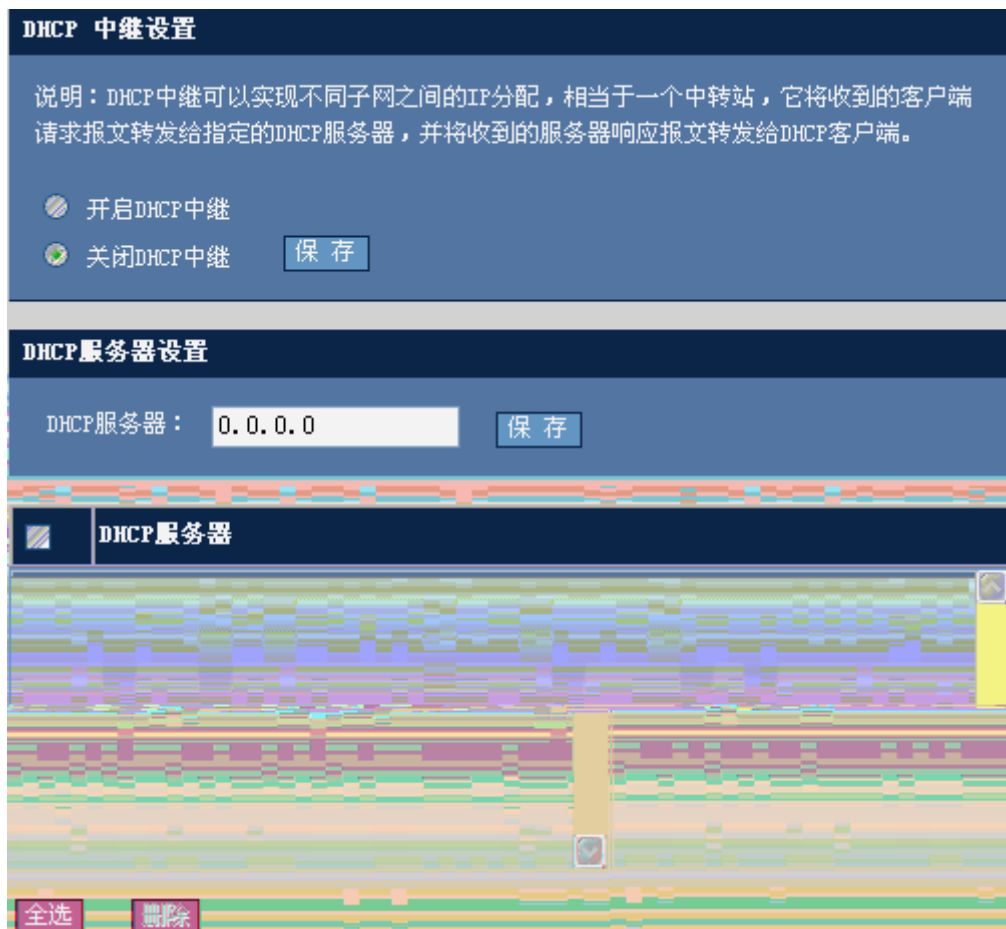
注意：若选择的参数该端口不支持，对应的参数设置将不生效！

端口：

状态： 双工： 速率： 流控：

描述：

端口	状态	双工	速率	流控	描述
Gi0/1	Down	Half	10	On	-
Gi0/2	Down	Half	10	On	-
Gi0/3	Down	Full	1000	Off	-
Gi0/4	Down	Auto	Auto	Off	-
Gi0/5	Down	Full	100	Off	-
Gi0/6	Down	Auto	Auto	Off	-
Gi0/7	Up	Full	100	Off	-
Gi0/8	Down	Auto	Auto	Off	-
Gi0/9	Down	Full	100	Off	-
Gi0/10	Down	Auto	Auto	Off	-
Gi0/11	Down	Auto	Auto	Off	-
Gi0/12	Down	Auto	Auto	Off	-



16 DHCP

1) / DHCP

/	DHCP	I	L	III
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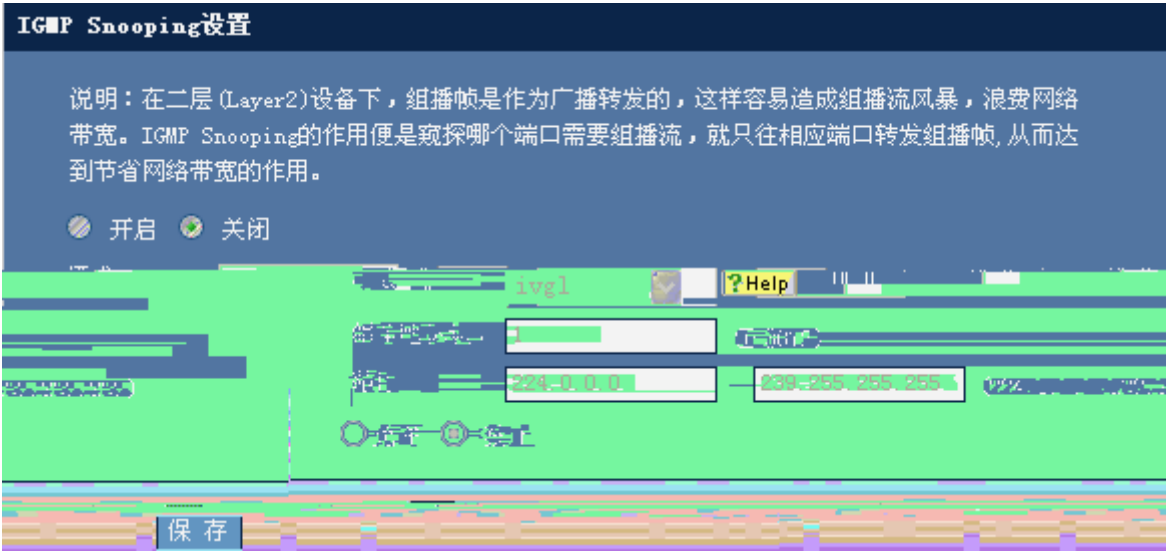
2)DHCP

$$\begin{array}{ccccc} & \text{DHCP} & & & \\ & & \text{I} & \text{L} & \text{III} \\ \text{III} & & \text{DHCP} & & \\ & & & \text{I} & \text{L} & \text{III} \end{array}$$

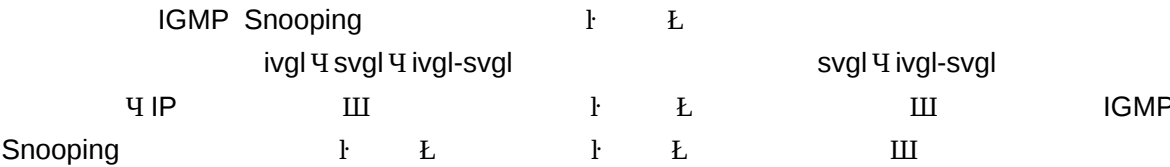
2.2.9 IGMP Snooping

I. IGMP Snooping L

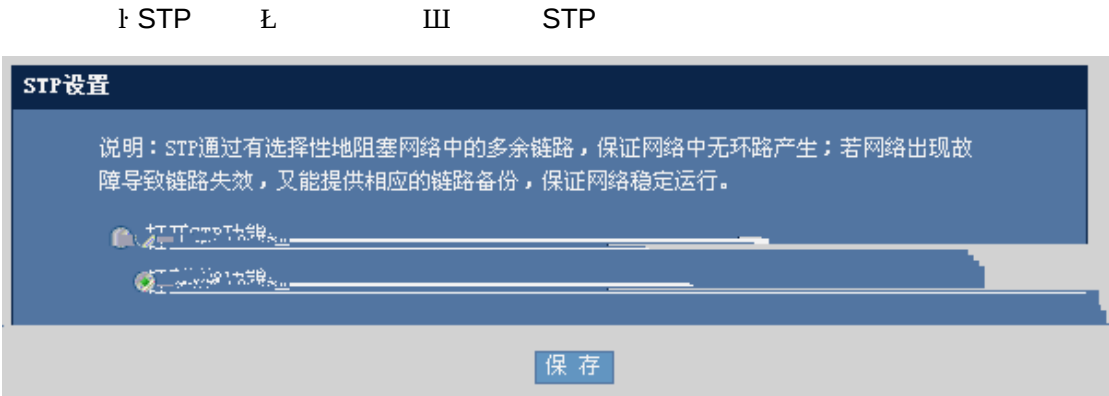
IGMP Snooping



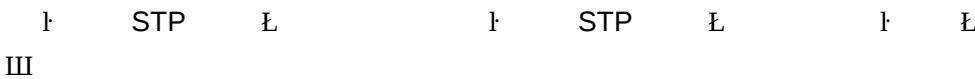
17 IGMP Snooping



2.2.10 STP



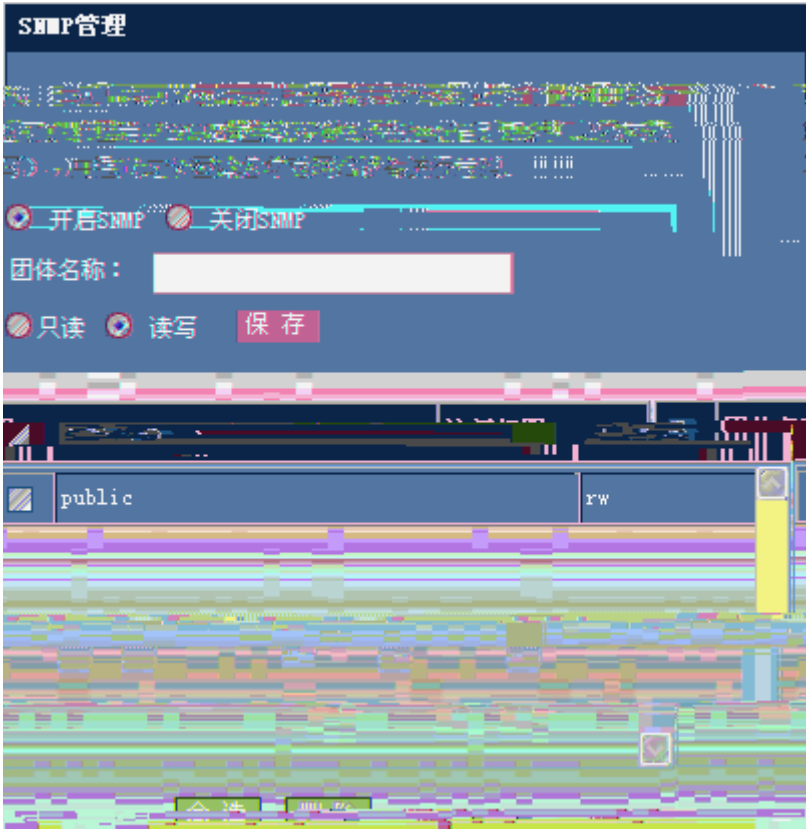
18 STP



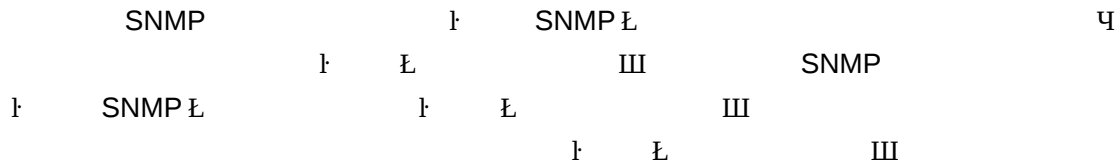
2.2.11 SNMP



SNMP

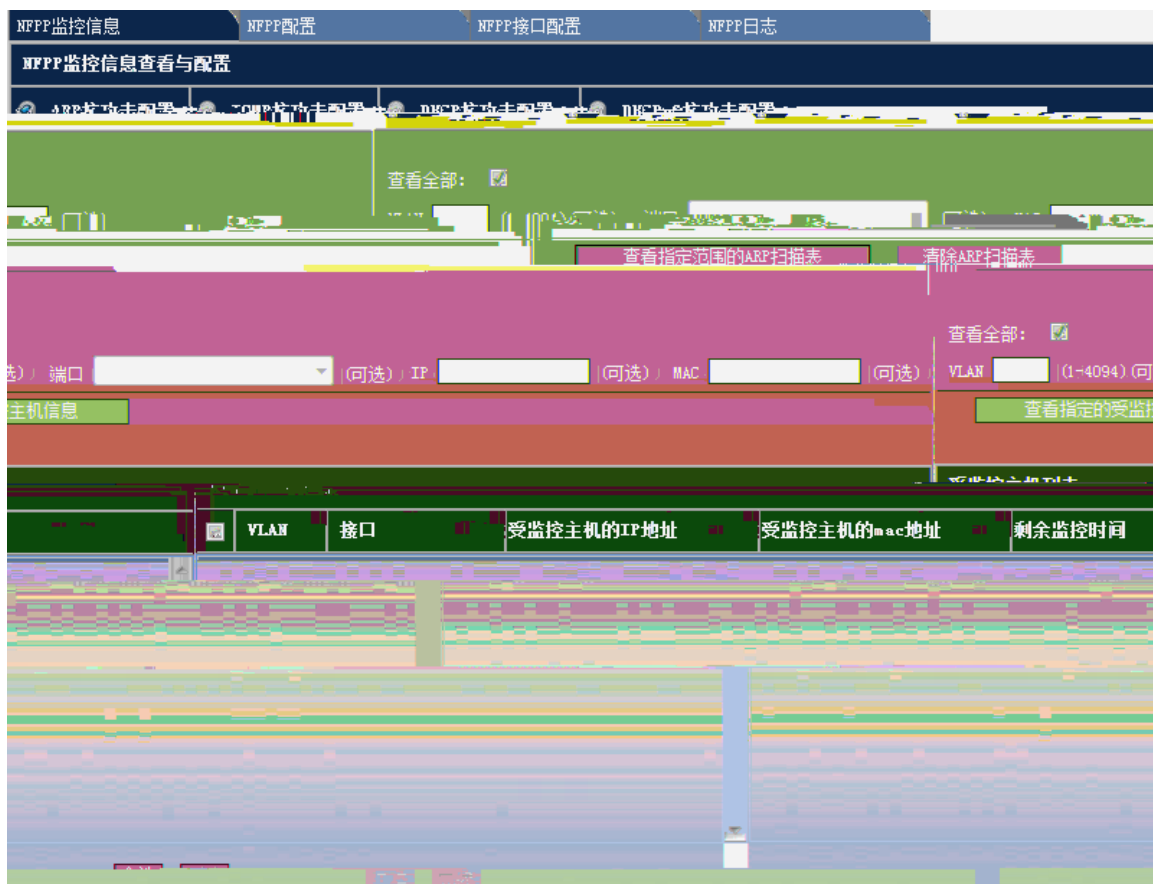


19 SNMP



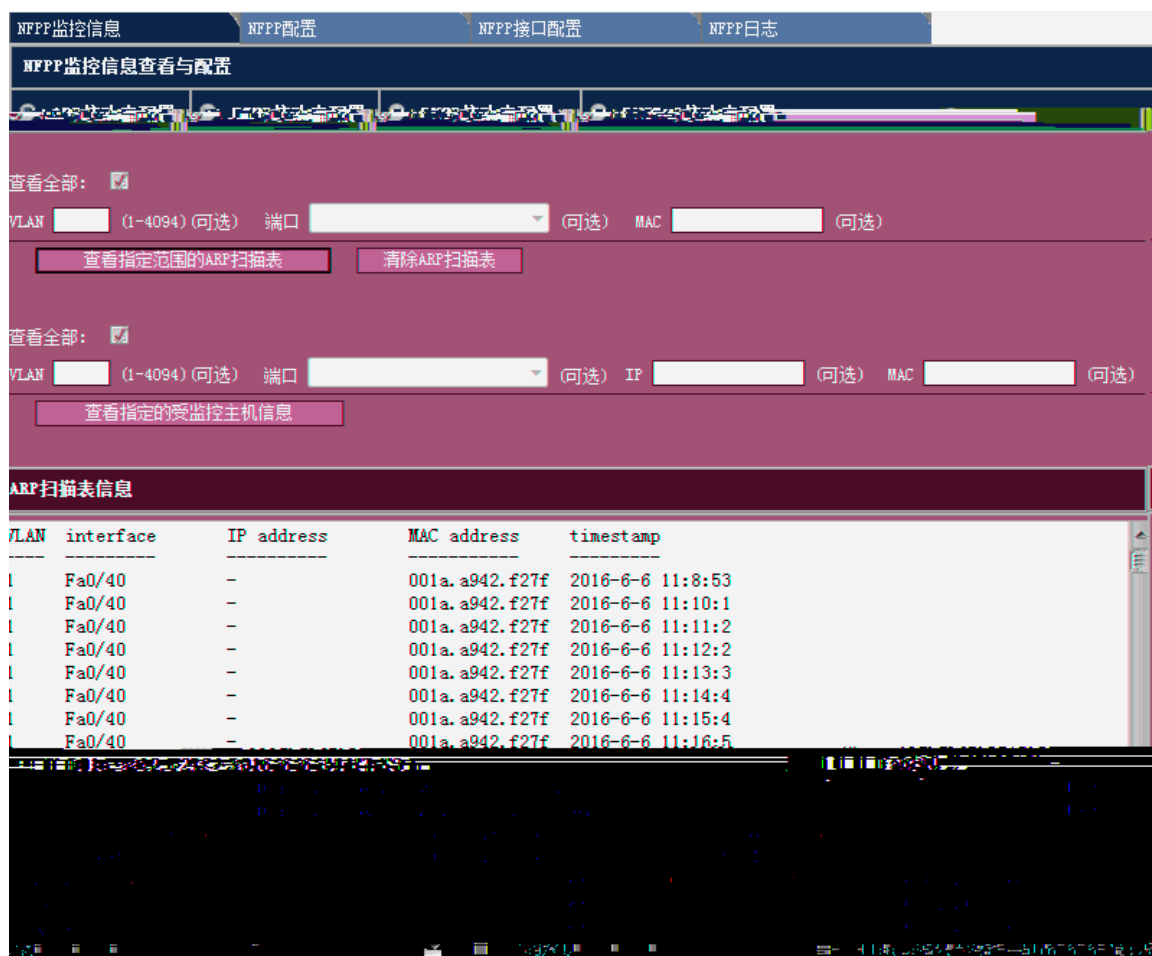
2.2.12 NFPP





20 NFPP

- ARP



21 ARP

ARP

1.

ARP

 $\mathbb{L}$

ARP

II

1.

ARP

For

ARP

III

ARP

1.

L

II

III

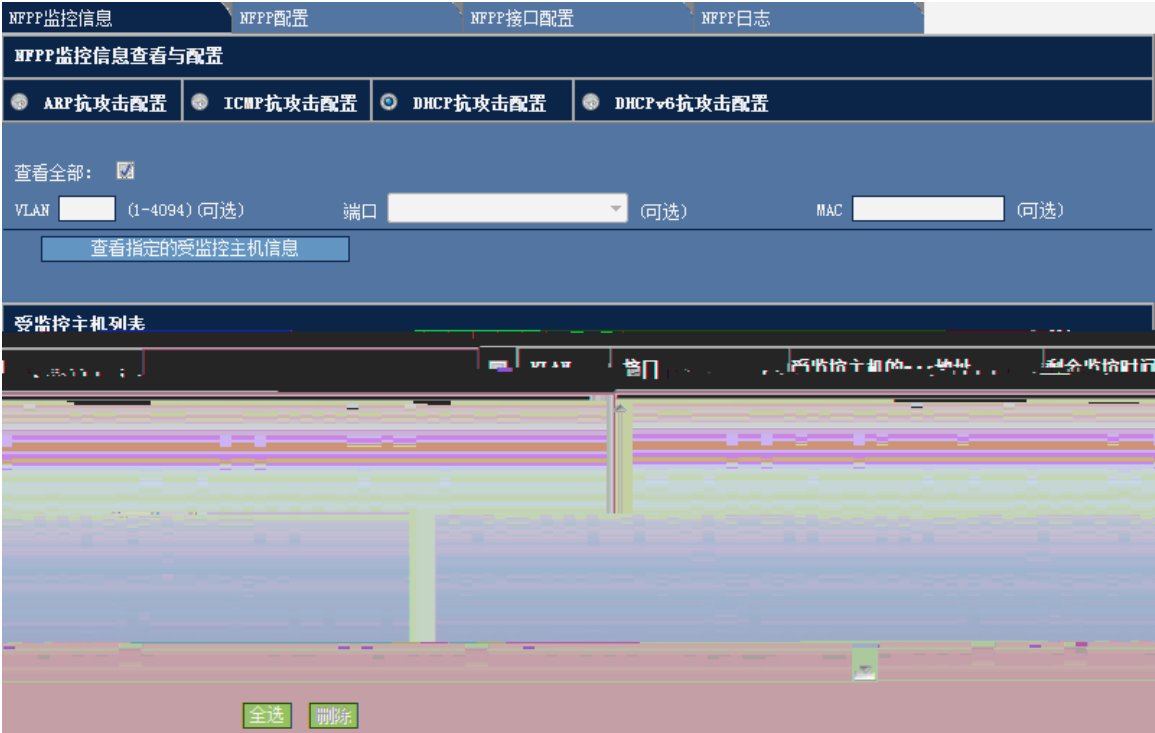
1.

$$\mathbb{L}$$

1.

III

- ICMP



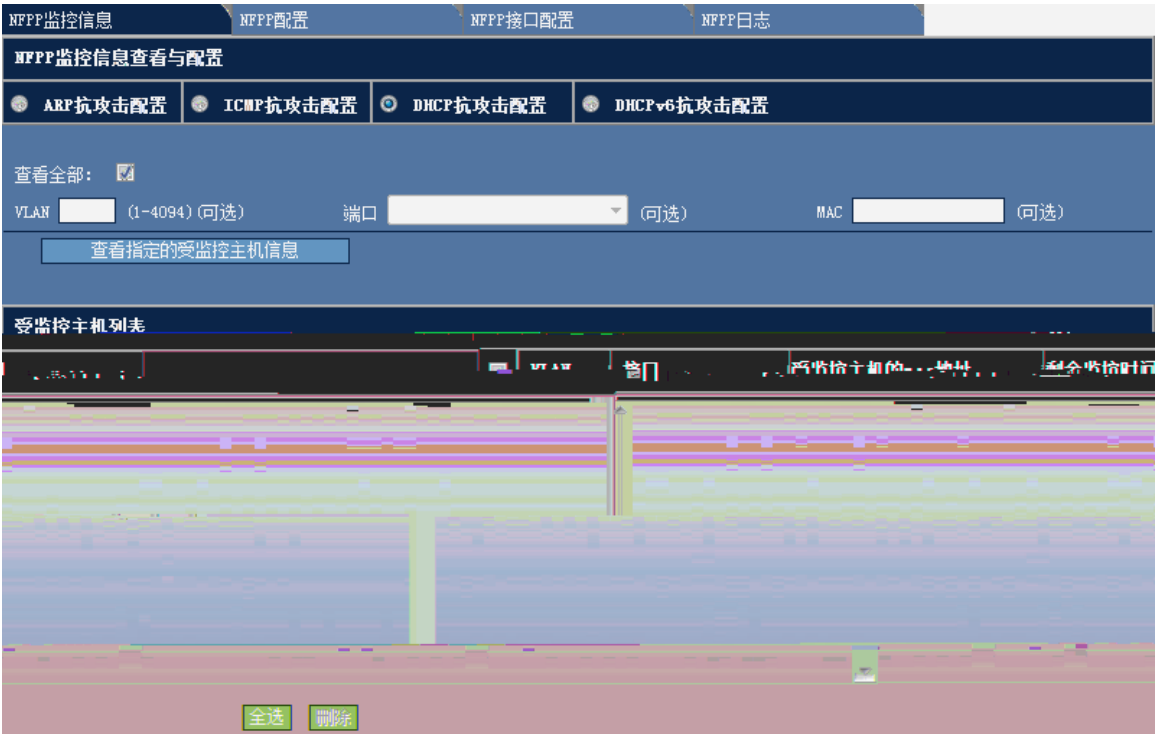
23 NFPP —DHCP

DHCP

1 1

1 1

● DHCPv6



24 NFPP —DHCP

DHCPv6

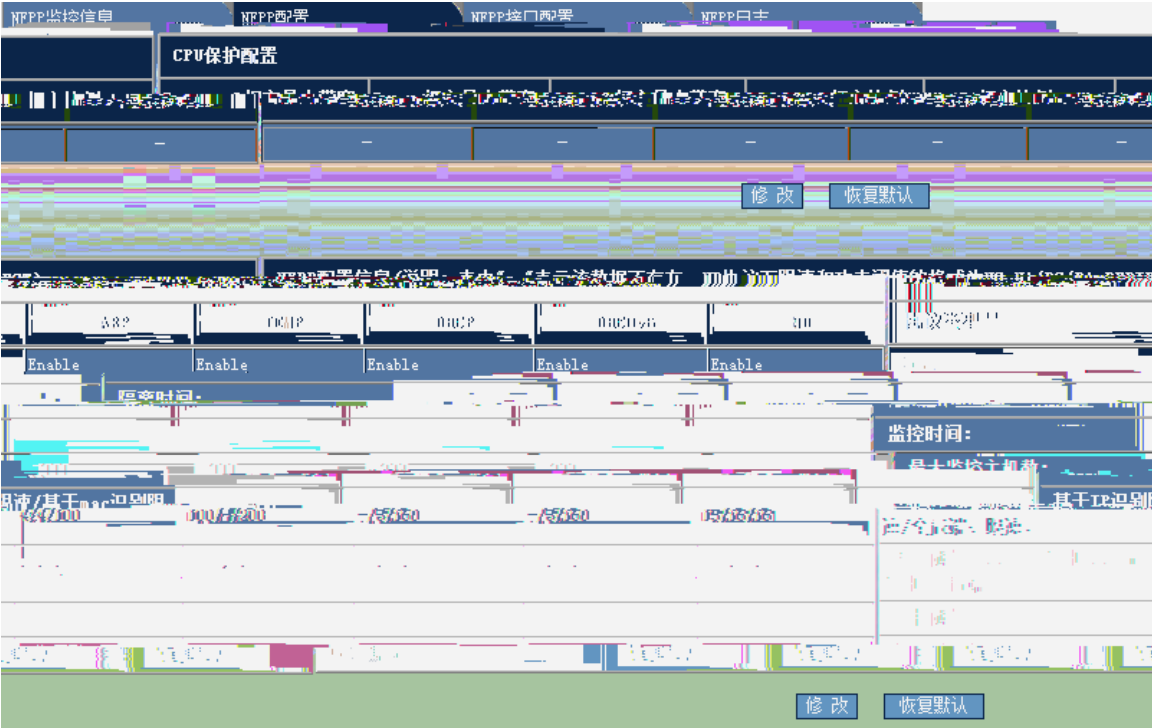
↑

↓

↑

↓

2 NFPP



WEB

CPU

f L

f L

NFPP监控信息NFPP配置NFPP接口配置NFPP日志

NFPP接口信息配置

ICMP攻击配置DHCP攻击配置DHCPv6攻击配置ND攻击配置ARP攻击配置

0/1

开启ARP攻击

关闭ARP攻击

默认

接口: FastEthernet

(可选): 限速值: 123 (1-9999) 攻击阈值: 123 (1-9999) 基于ip/vid/端口识别主机

(可选): 限速值: 789 (1-9999) 攻击阈值: 789 (1-9999) 基于mac/vid/端口识别主机

(可选): 限速值: 123 (1-9999) 攻击阈值: 456 (1-9999) 基于port端口识别主机 (可

0/30-86400) (可选) ☒ 永久隔离 扫描阈值: 123 (1-9999) (可选) 隔离时间: 123

保存

攻击状态	隔离时间	限速值 (基于IP/MAC/PORT)	攻击阈值 (基于IP/MAC/PORT)	扫描阈值	☐	接口	ARP攻击
	123	123/789/123	123/789/456	123	☒	Fa0/1	Enable

全选

删除

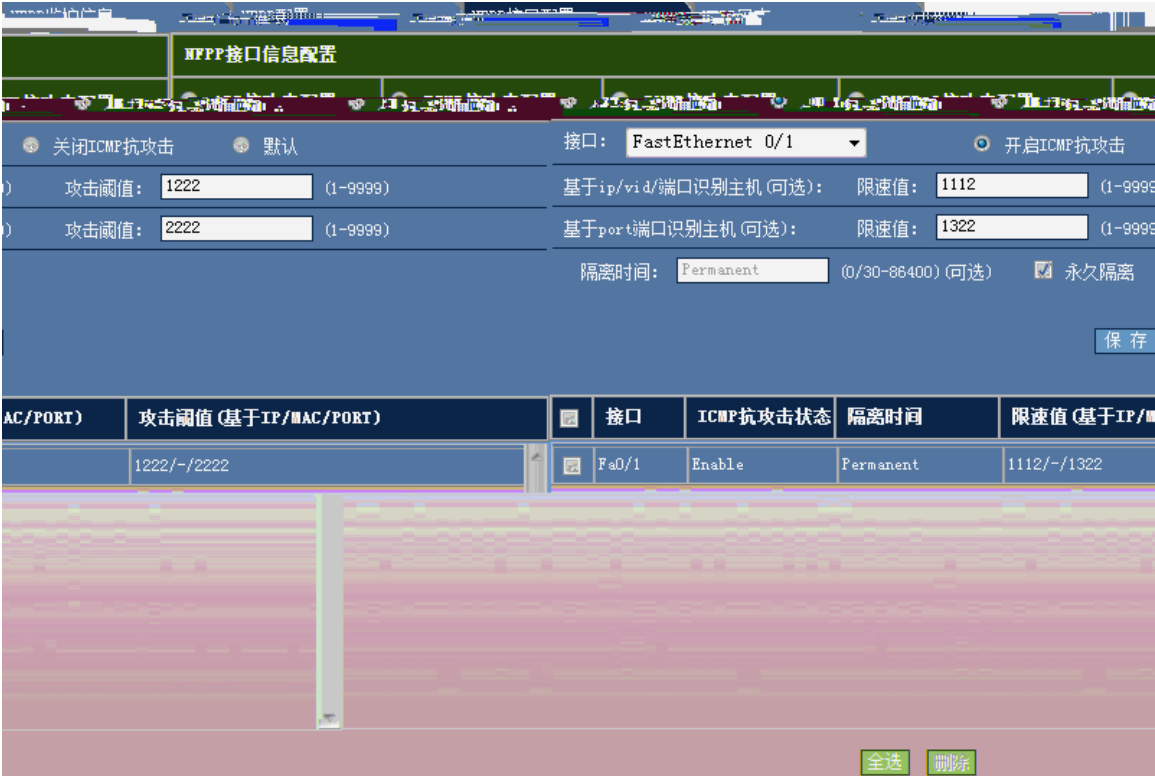
28 NFPP —NFPP ARP

ARP NFPP

I L

III

- ICMP



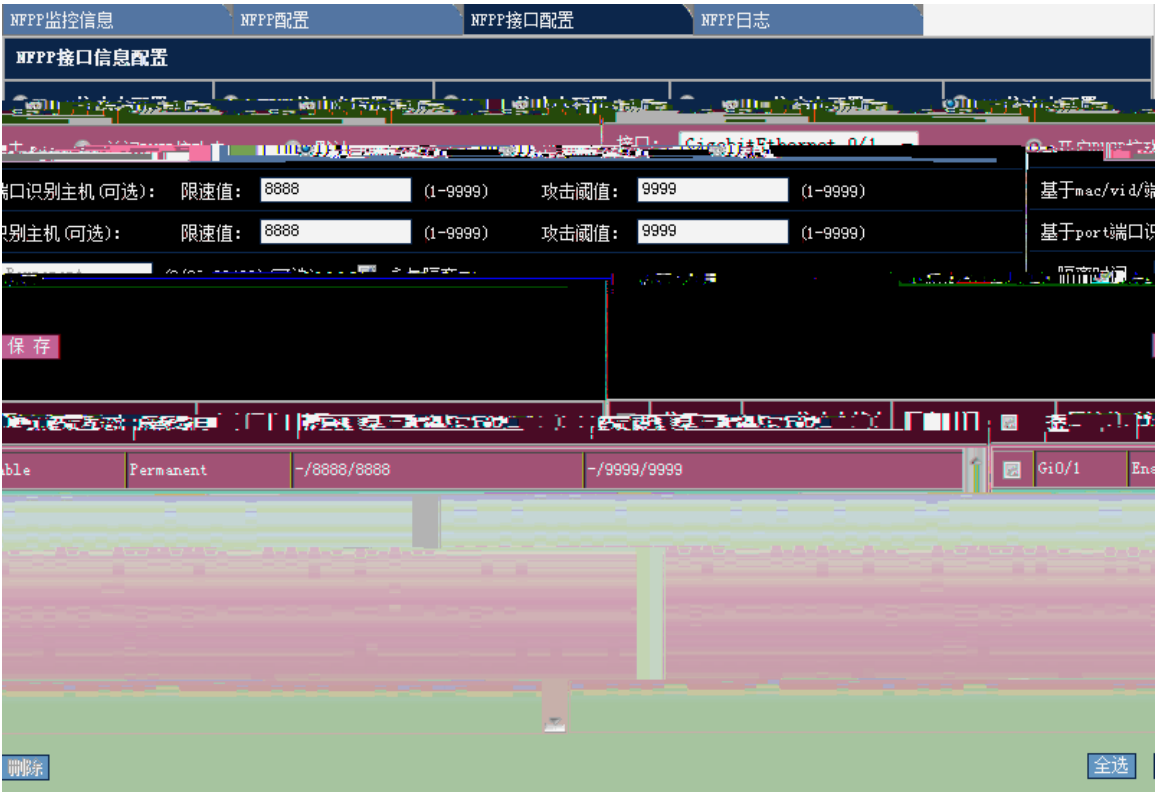
29 NFPP —NFPP ICMP

ICMP NFPP

I L

III

- DHCP



30 NFPP —NFPP DHCP

DHCP NFPP
f L

III

- DHCPv6

NFPP监控信息NFPP配置NFPP接口配置NFPP日志

抗攻击配置ND抗攻击配置

接口信息配置

攻击默认

接口GigabitEthernet 0/1

基于mac/vid/端口识别主机(可选):

基于port端口识别主机(可选):

隔离时间: Permanent

保存

9999(1-9999)

8888(1-9999)

攻击阈值:

9999(1-9999)

8888(1-9999)

攻击阈值:

0/30-88400(可选)

永久隔离

MAC(PORT)	接口	DHCPv6攻击状态	隔离时间	限速值(基于IP/MAC/PORT)	攻击阈值(基于IP/MAC/PORT)
	Gi0/1	Enable	Permanent	-/8888/8888	-/9999/9999

全选删除

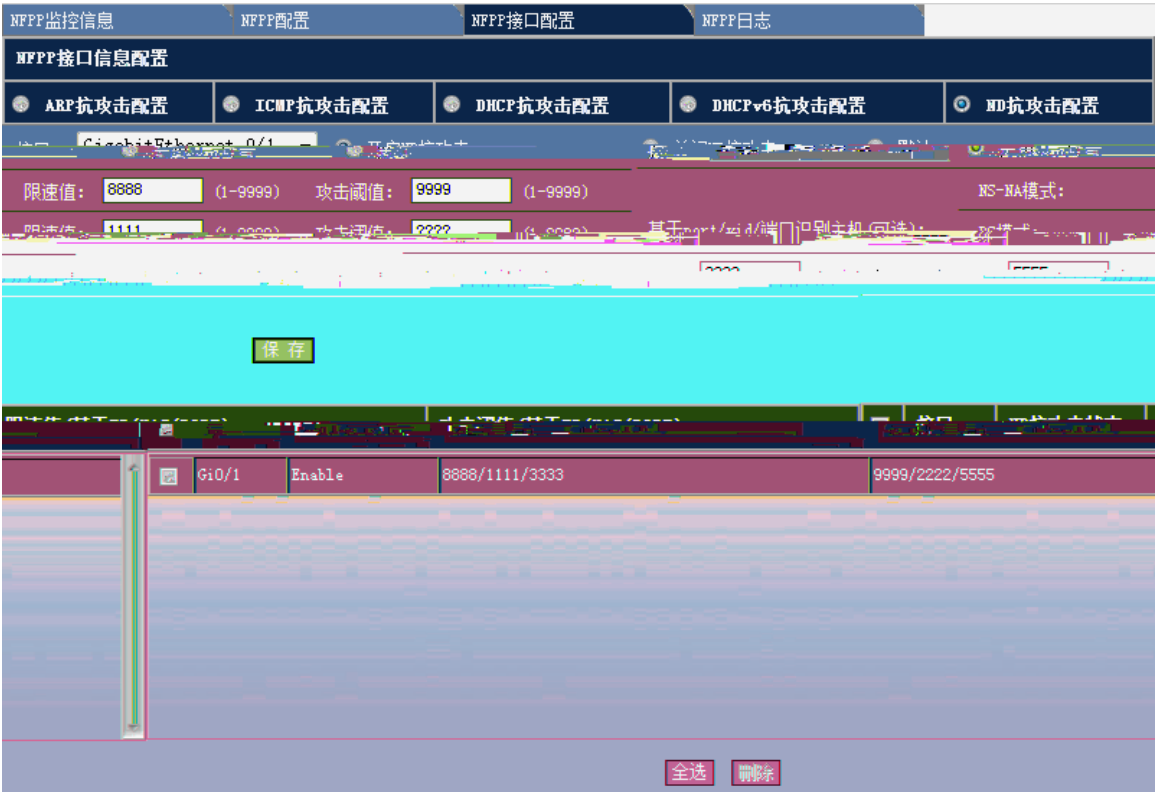
31 NFPP —NFPP DHCPv6

DHCPv6 NFPP

f L

III

- ND



32 NFPP —NFPP ND

ND
t L

III

4 NFPP

NFPP监控信息

NFPP配置

NFPP接口配置

NFPP日志

NFPP日志信息配置

日志缓冲区大小: (0-1024) (可选) 生成系统消息速率: 消息数: (0-1024) (可选) 时间长度: (0-86400) (可选)

指定需要记录日志的VlanID (用“-”隔开, 相连的区间可用“-”连接): (1-4094) (可选)

添加

删除

清除

重置

帮助

返回

保存

恢复默认值

查看日志缓冲区

清空日志缓冲区

需要记录日志的端口

缓冲区大小

生成系统消息速率

需要记录日志的VLAN

需要记录日志的端口	缓冲区大小	生成系统消息速率	需要记录日志的VLAN
1-4094	Gi0/1, Gi0/2, Gi0/3,	1000	1024/86400

MFPP日志信息配置

日志缓冲区大小: 1000 (0-1024) (可选) 生成系统消息速率: 消息数: 1024 (0-1024) (可选) 时间长度: 88400 (0-88400) (可选)

指定需要记录日志的IP地址(用“|”隔开, 指定范围可用“-”连接)

添加

删除

删除

查看日志缓冲区

清空日志缓冲区

GigabitEthernet 0/1

GigabitEthernet 0/2

GigabitEthernet 0/3

保存

恢复默认值

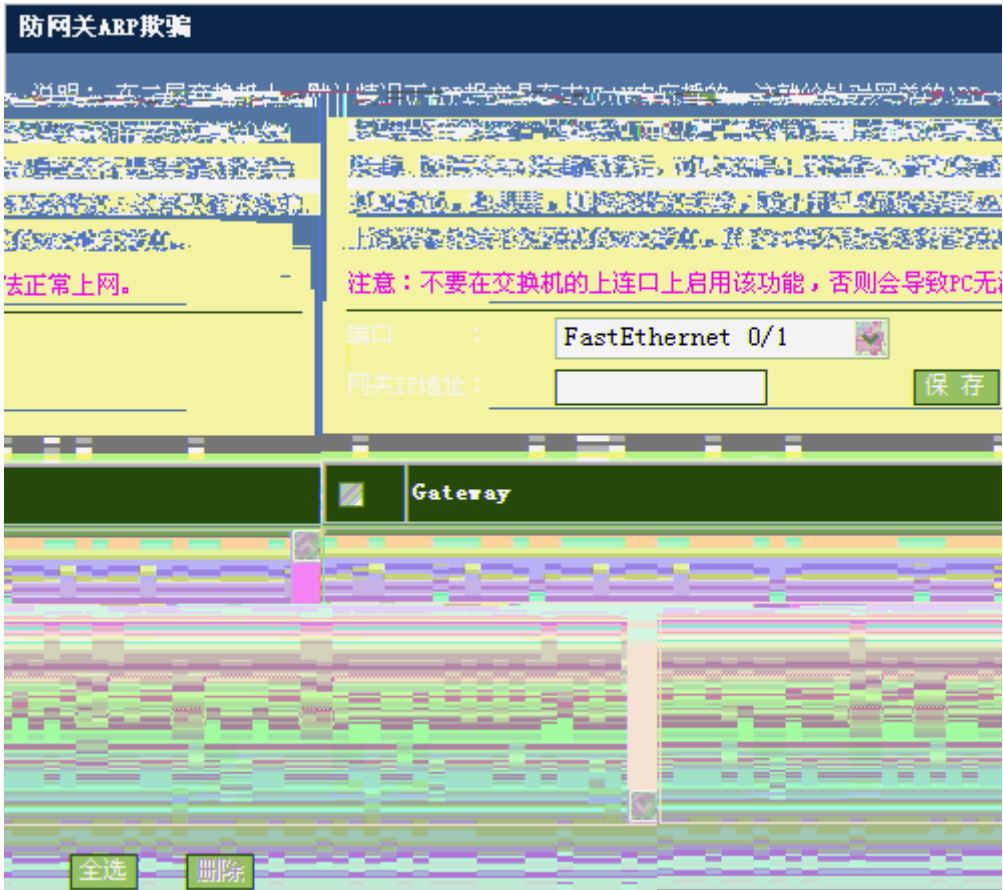
ReasonTimestamp

ProtocolVLANInterfaceIP addressMAC address

2.3

2.3.1 ARP

I ARP L III
ARP



35 ARP

1 1

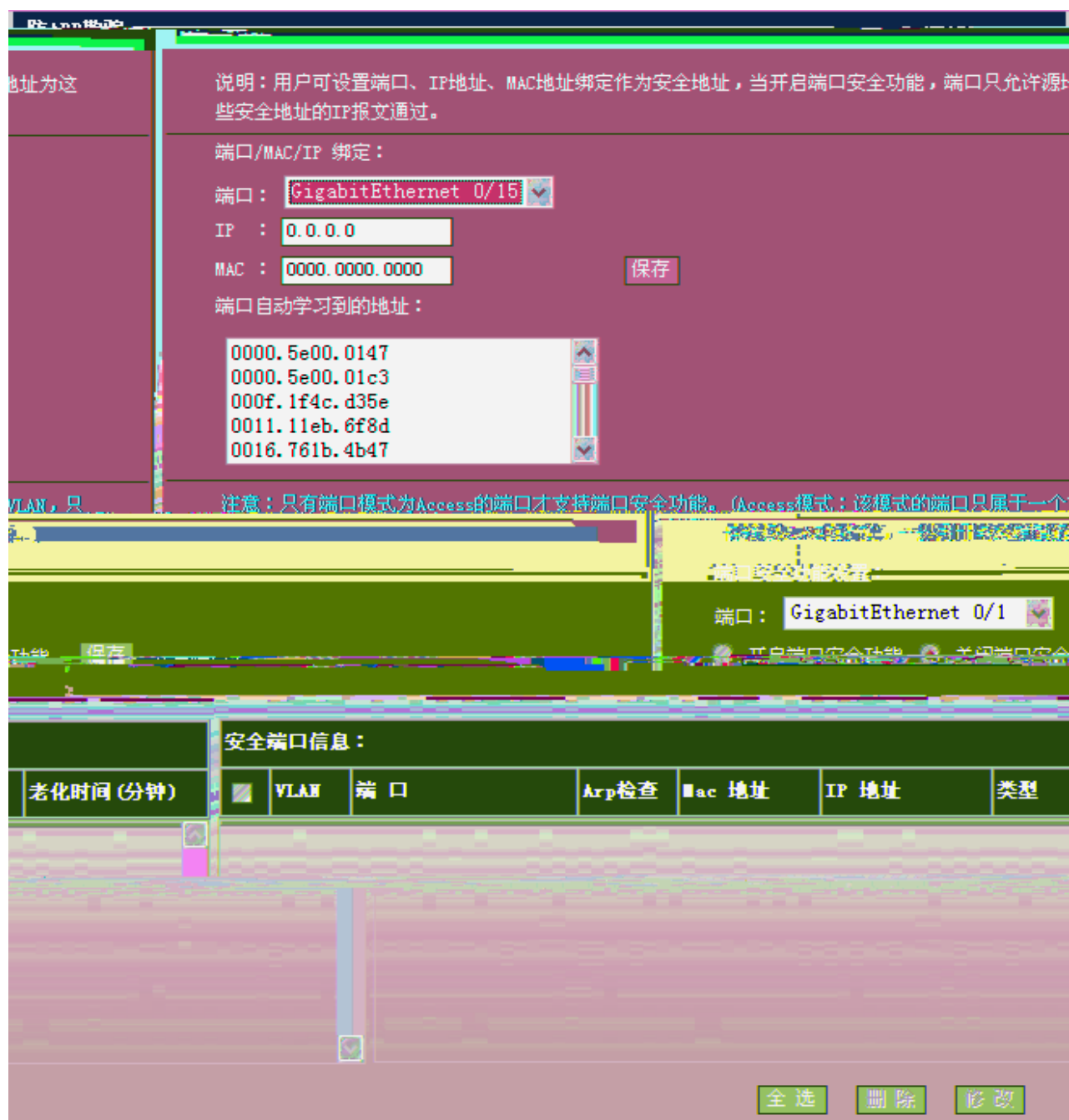
1 1

III

2.3.2 ARP

1 ARP 1 III

ARP



36 ARP

1) /MAC/IP

/MAC/IP

IP MAC 上 下

MAC

GigabitEthernet 0/15

MAC III

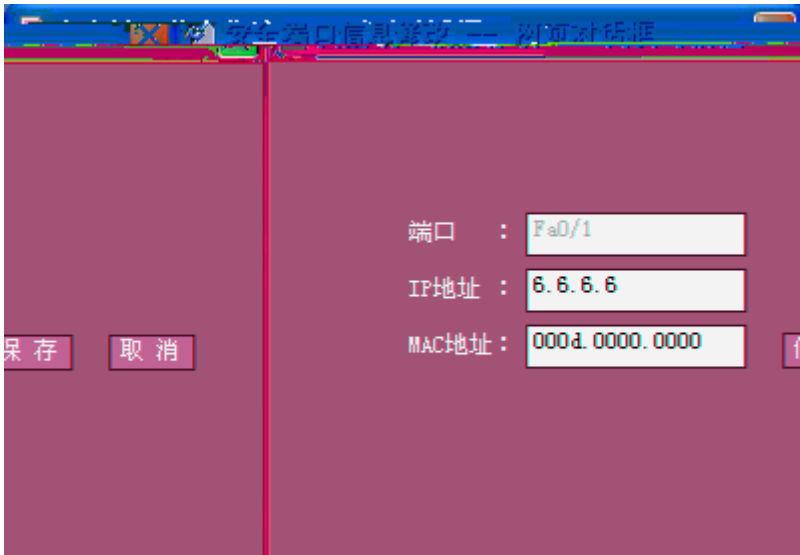
2

III

III

3)

I L



37

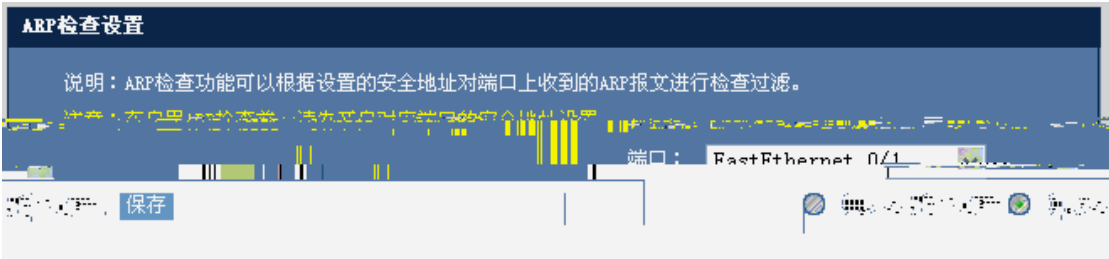
I L

III

2.3.3 APR

I ARP L III

ARP



38 ARP

I ARP L

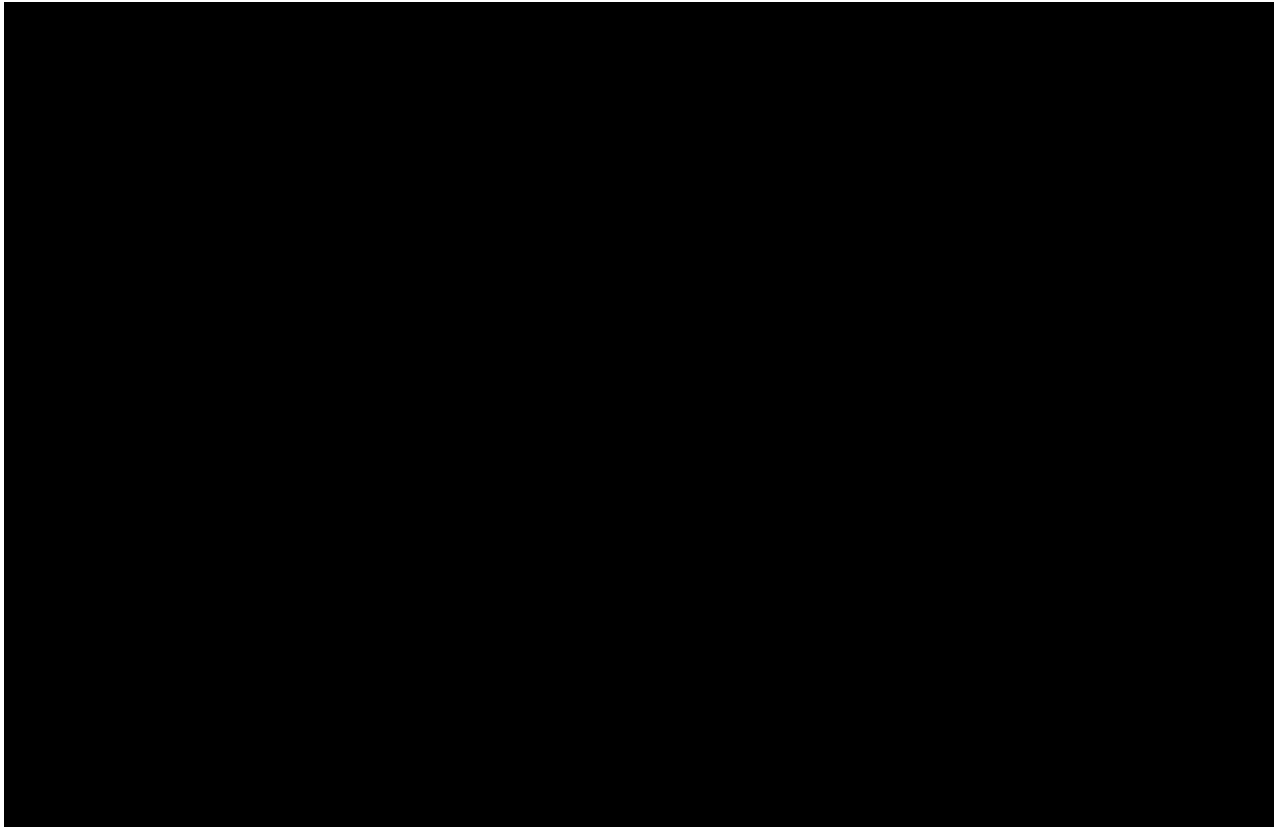
I ARP L III

2.3.4 ACL

f ACL Ł

III

ACL



39 ACL

1 ACL

ACL

ACL

f Ł

f Ł

2 ACL

IP

f

IP

Ł

IP

ACL

III

III

ACL

ACEIII

ACL

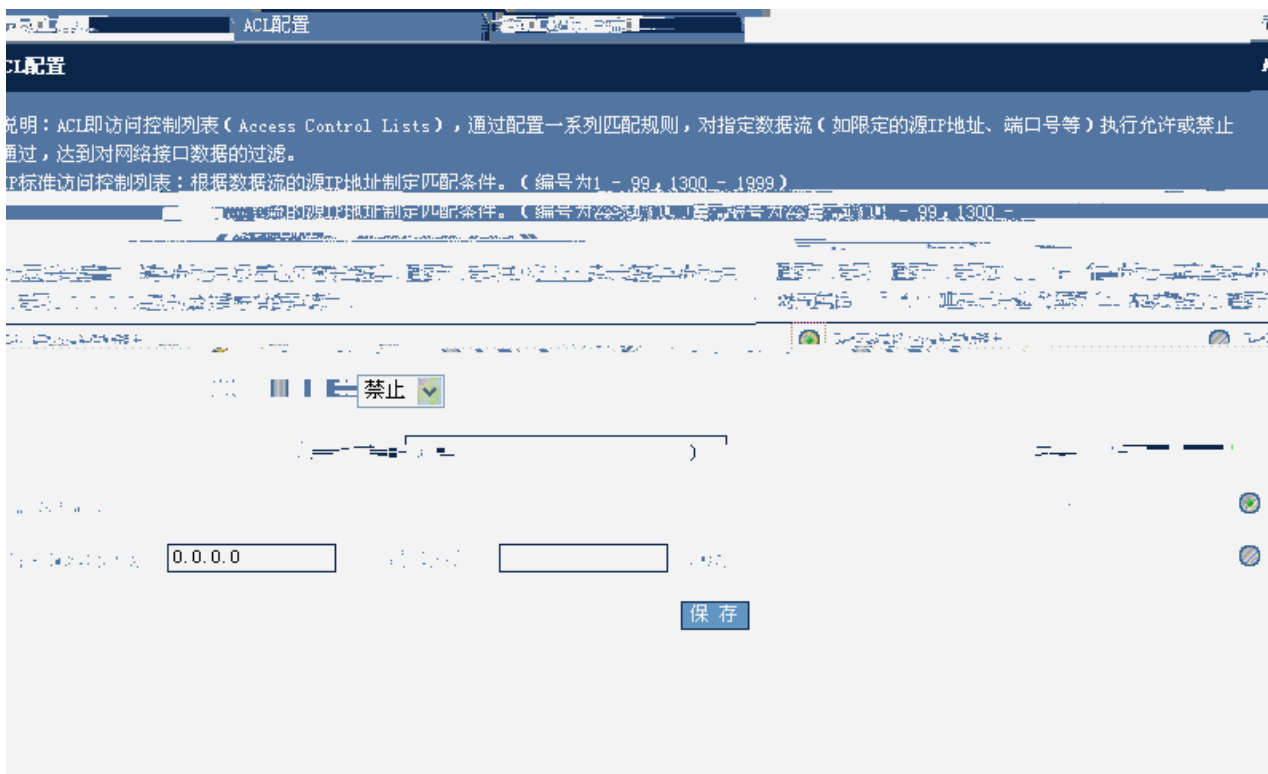
ACL

ACE

f

Ł

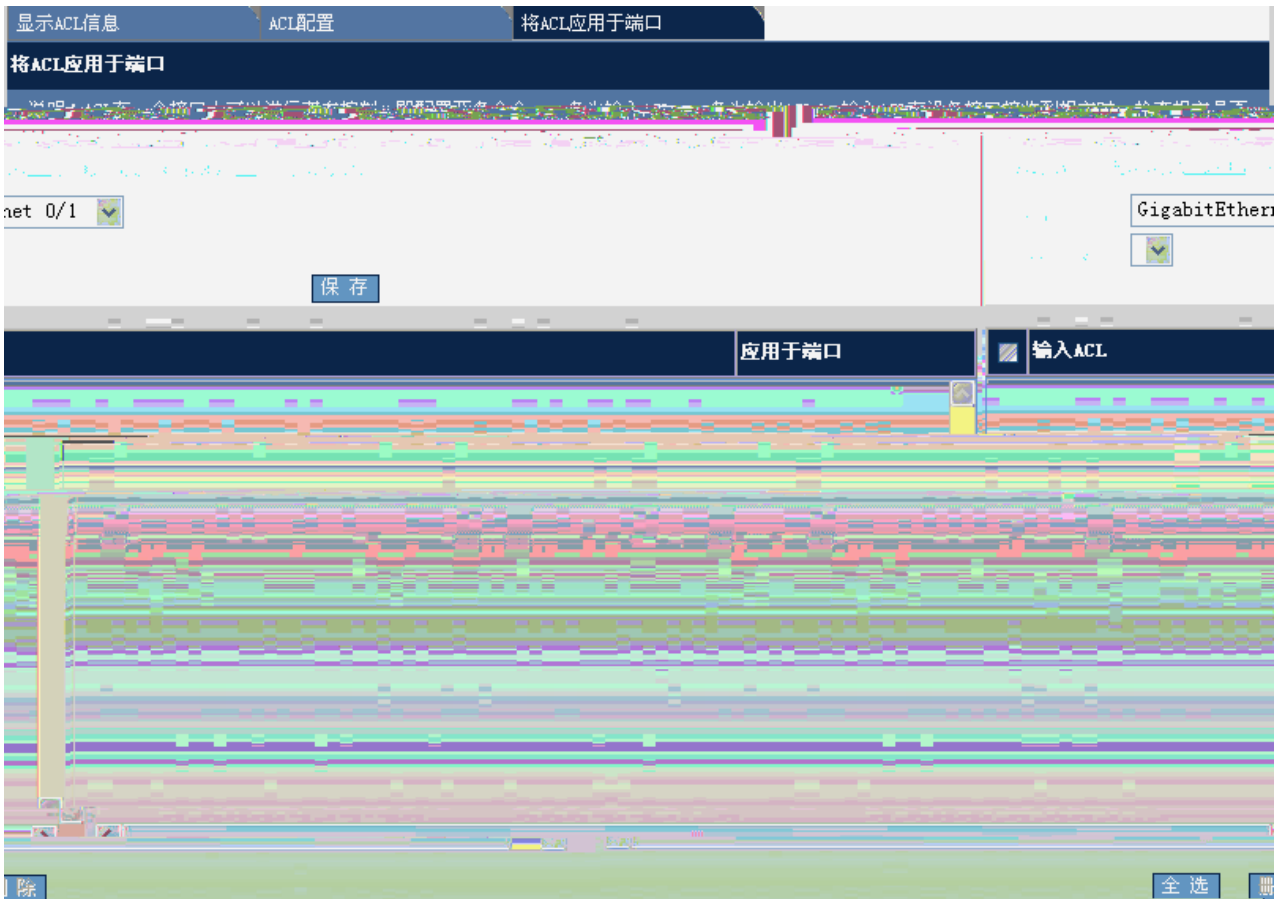
ACE



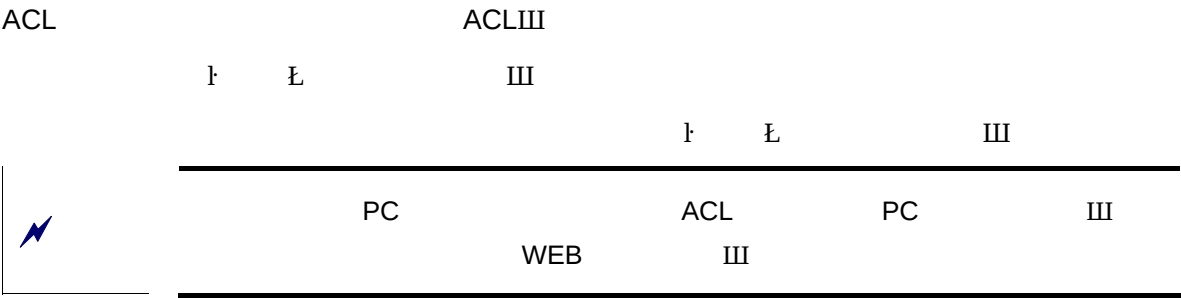
40 IP

[illegible]

[illegible]

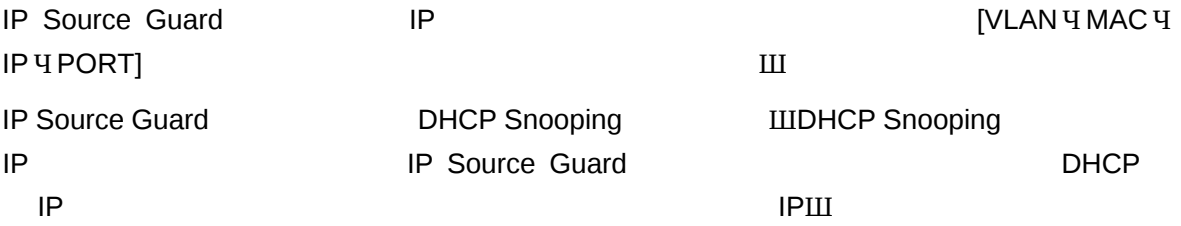


42 ACL



2.3.5 IP Source Guard

IP Source Guard:



IP Source Guard

DHCP Snooping

III

I IP Source Guard

III

IP Source Guard



43 IP Source Guard

1

IP Source Guard

III

IP+MAC

I

IP+MAC

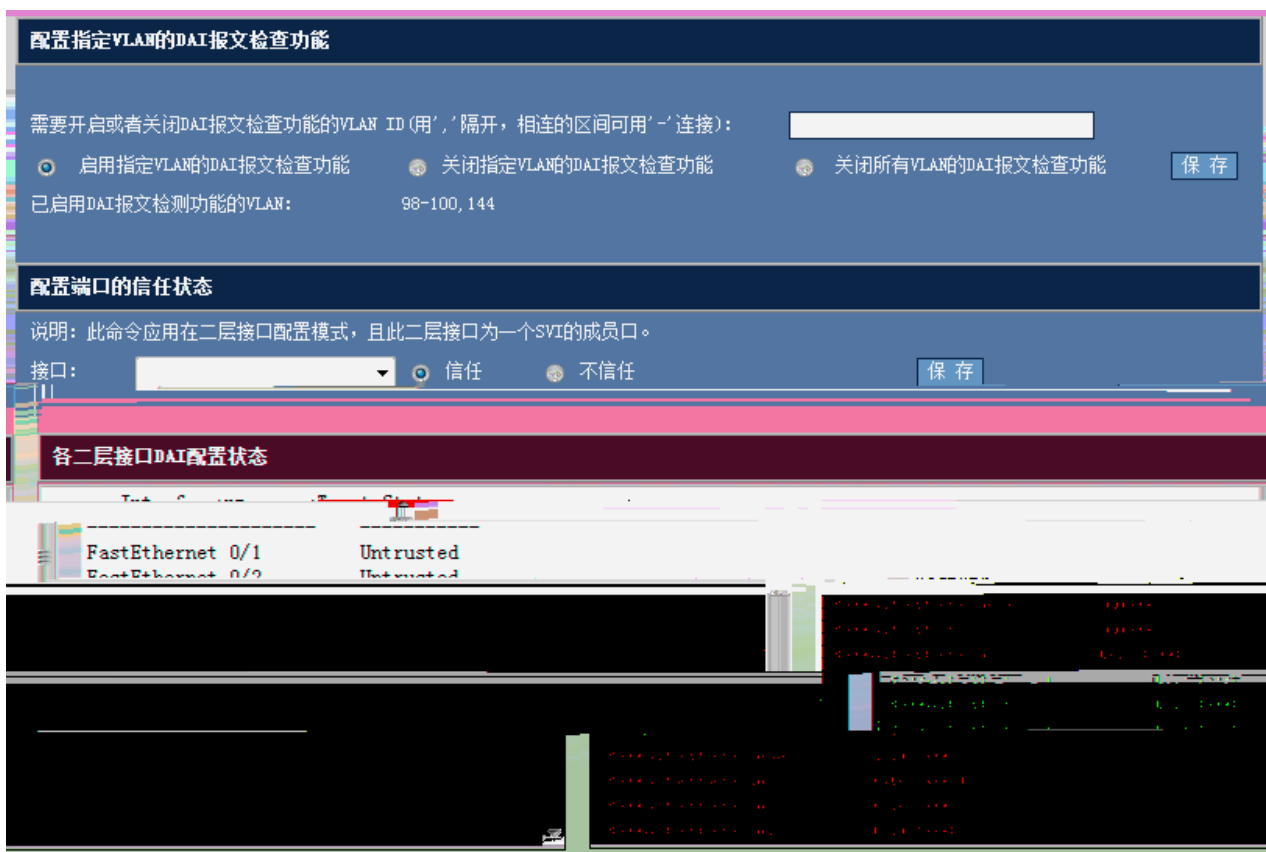
()

2

IP

MAC

MAC



45 DAI

1

VLAN DAI

VLAN DAI III

VLAN 100 DAI vlan-id 100 ARP DAI

III

1

DAI VLAN ID L VLAN III

VLAN DAI

III

DAI VLAN III

2

DAI ARP

DAI ARP ARP

DAI III

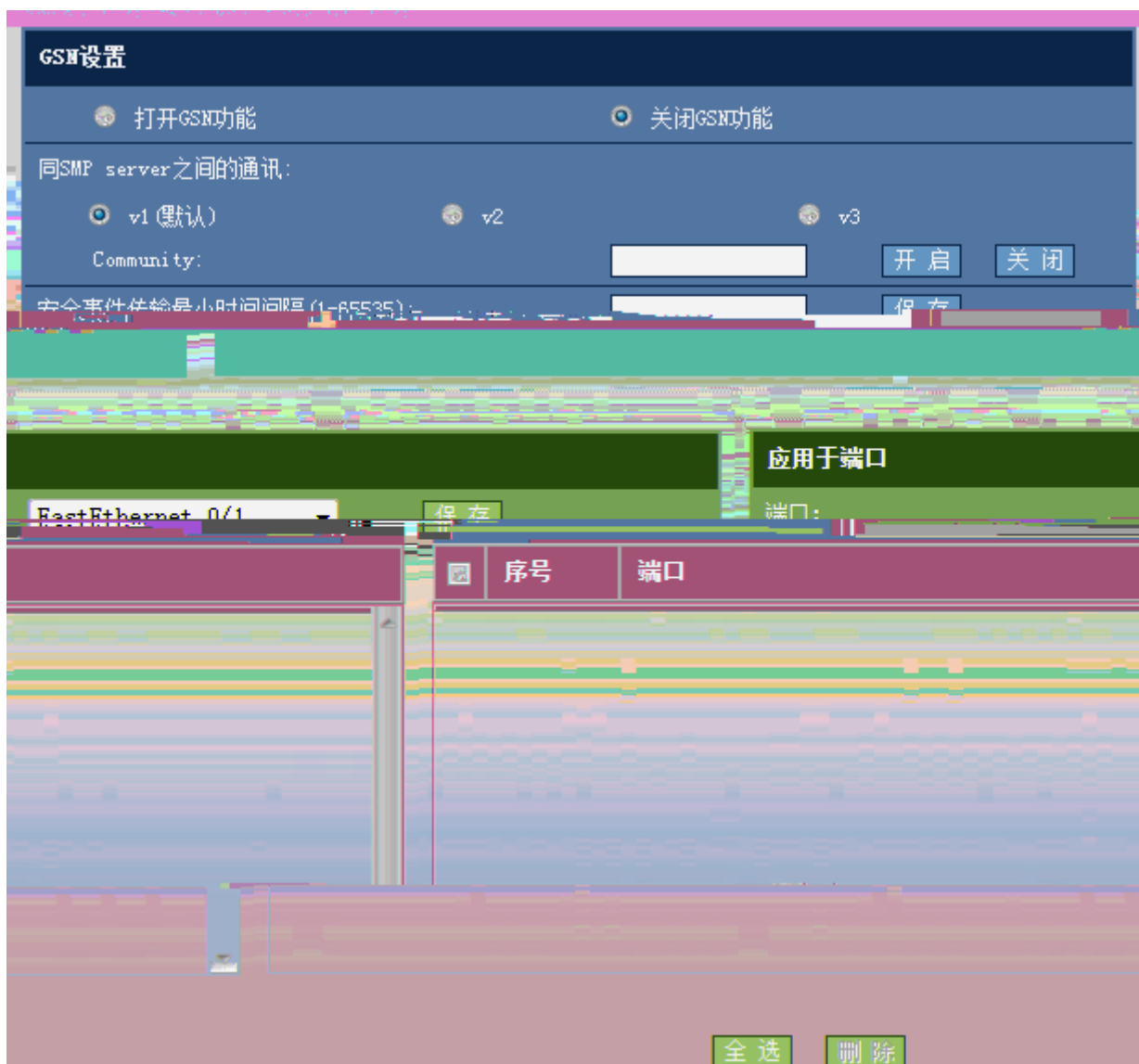
III

1 L 1 L III

2.3.7 GSN

I GSN Ł III

GSN



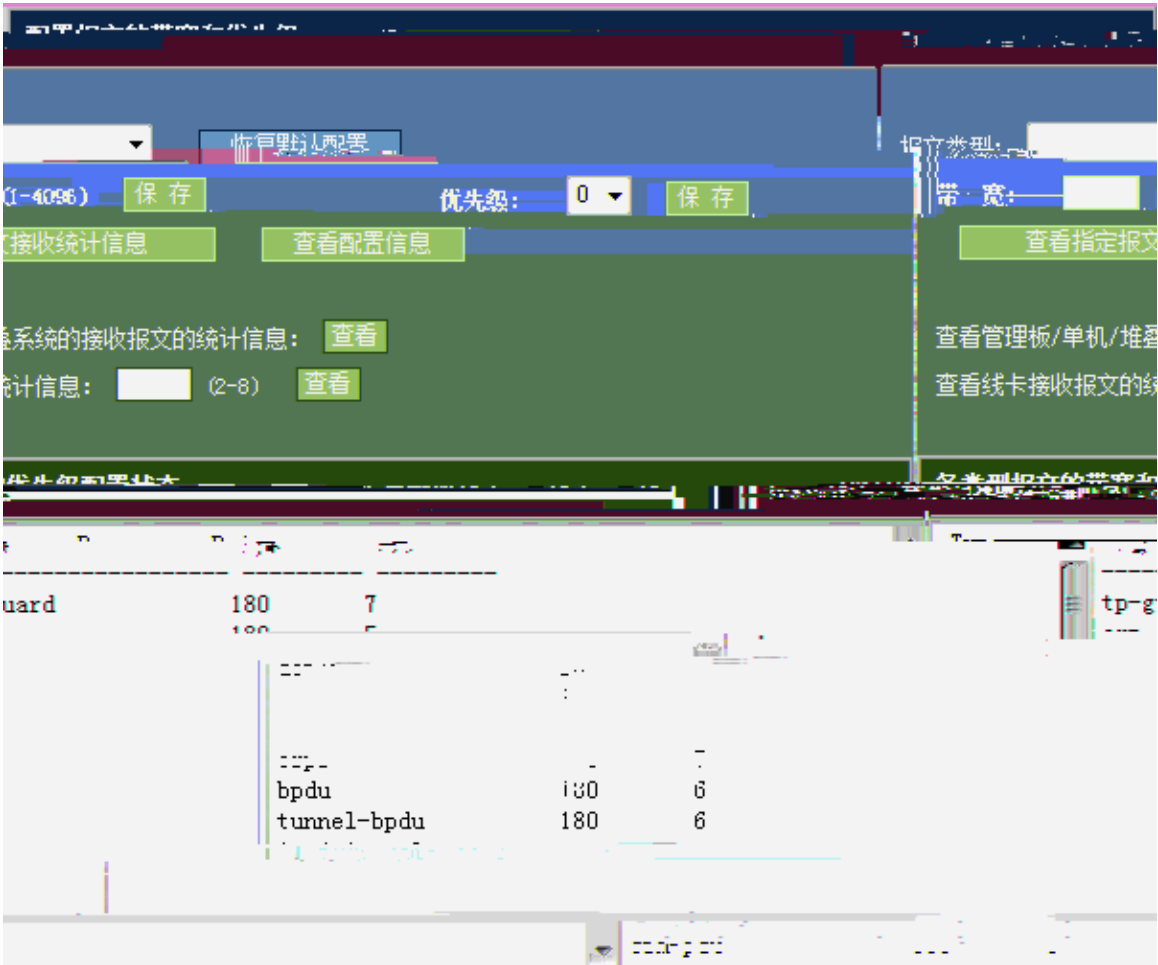
46 GSN

- | | | | | | | | |
|----|------------|-----|-----|-----|--|--------------------|------|
| 1) | GSN | | | | | | |
| | GSN | GSN | GSN | | | GSN _{III} | |
| 2) | SMP server | | | | | | |
| | SMP server | v1 | v2 | v3 | | Community | User |
| | | III | | III | | | |
| 3) | | | | | | | |

GSN
GSN
III
III

2.3.8 CPP

I CPP L III



47 CPP

I L III
I L III
I L III
I L III

arp报文接收统计信息				
Slot	Type	Pps	Total	Drop
MainBoard	arp	10	324430	0

48

$$\vdash \quad \quad \quad \mathbb{L}$$

Type	Pos	Pri
tp-guard	180	7
dot1x	2000	4
rldo	180	7
tunnel-bpdu	180	6
ipv4-icmp-local	1600	6
lldp	180	5
lldp_cdp	180	5
cfa-pdu	180	3

49

$$\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} \frac{e^{-t^2}}{1+t^2} dt = \frac{\pi}{2}$$

Type	Pps	Total	Drop
All	0	0	0
Unicast	0	0	0
Broadcast	0	0	0
Multicast	0	0	0
Unknown-unicast	0	0	0
Unknown-multicast	0	0	0
Unknown-broadcast	0	0	0
Unknown-ether	0	0	0
Unknown-ip	0	0	0
Unknown-tcp	0	0	0
Unknown-udp	0	0	0
Unknown-other	0	0	0

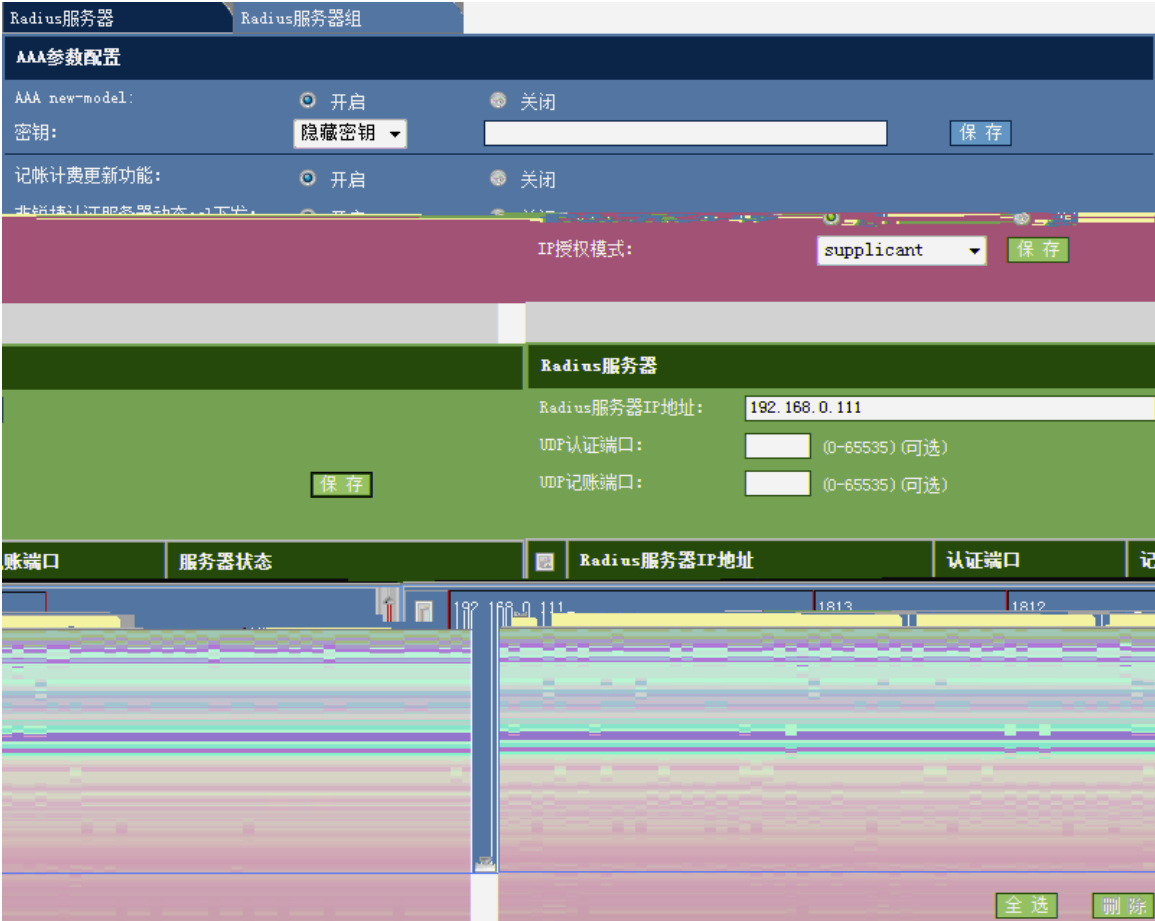
50 / /

I L III

2.3.9 RADIUS

I RADIUS L III

1 RADIUS



51 RADIUS

III AAA AAA new-model I L AAA RADIUS

Radius服务器

Radius服务器组

AAA配置向导

AAA new-model

记帐计费更新功能：☒ 开启 ☐ 关闭

非锐捷认证服务器动态acl下发：☒ 开启 ☐ 关闭

IP授权模式：

disable

保存

Radius服务器组

组名：

Radius服务器IP地址：

UDP认证端口： (0-65536) (可选)

UDP记账端口： (0-65536) (可选)

保存

刷新

 Radius服务器组管理：

radius

删除

=====Radius group radius=====

Vrf:not-set

Server:7::1

Authentication port:1812

Accounting port:1813

State:Active

Server:::1

Authentication port:1812

Accounting port:1813

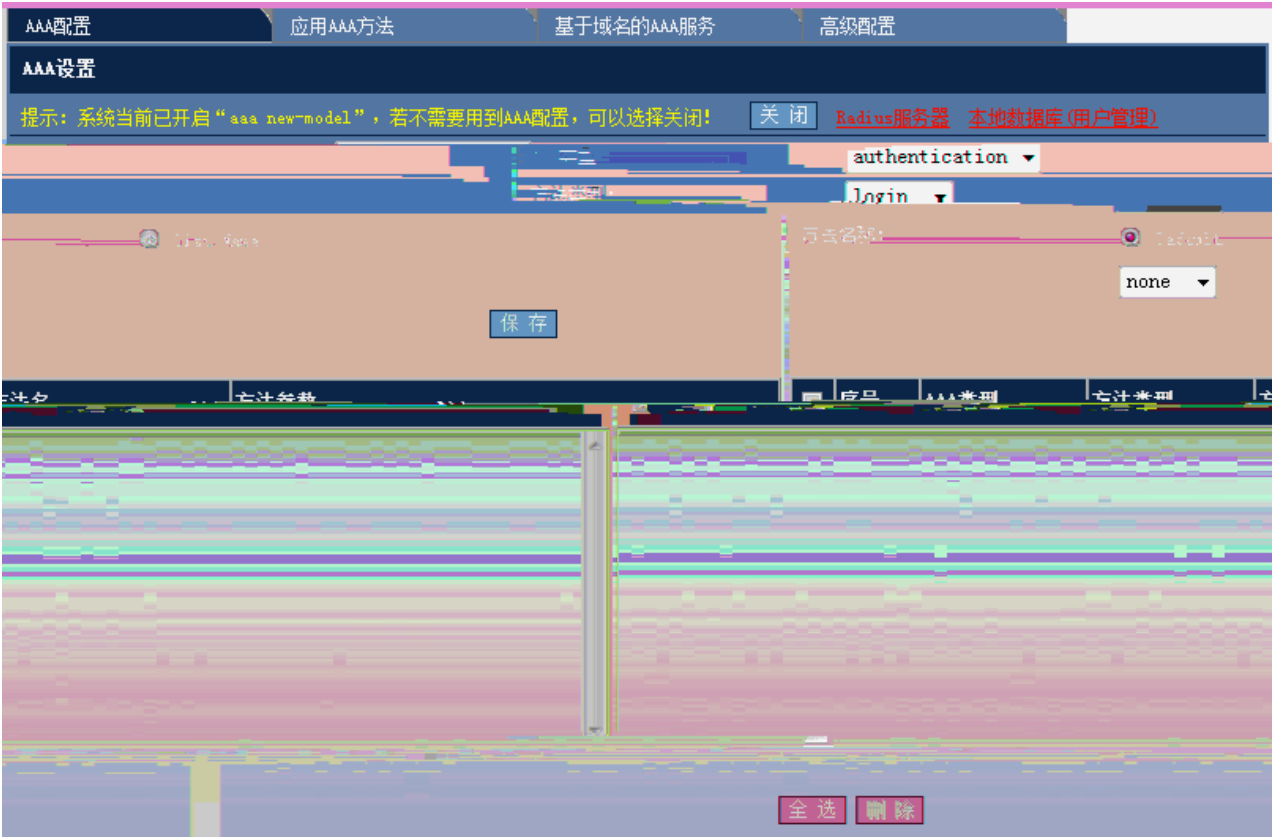
State:Active

Server:::

Authentication port:1812

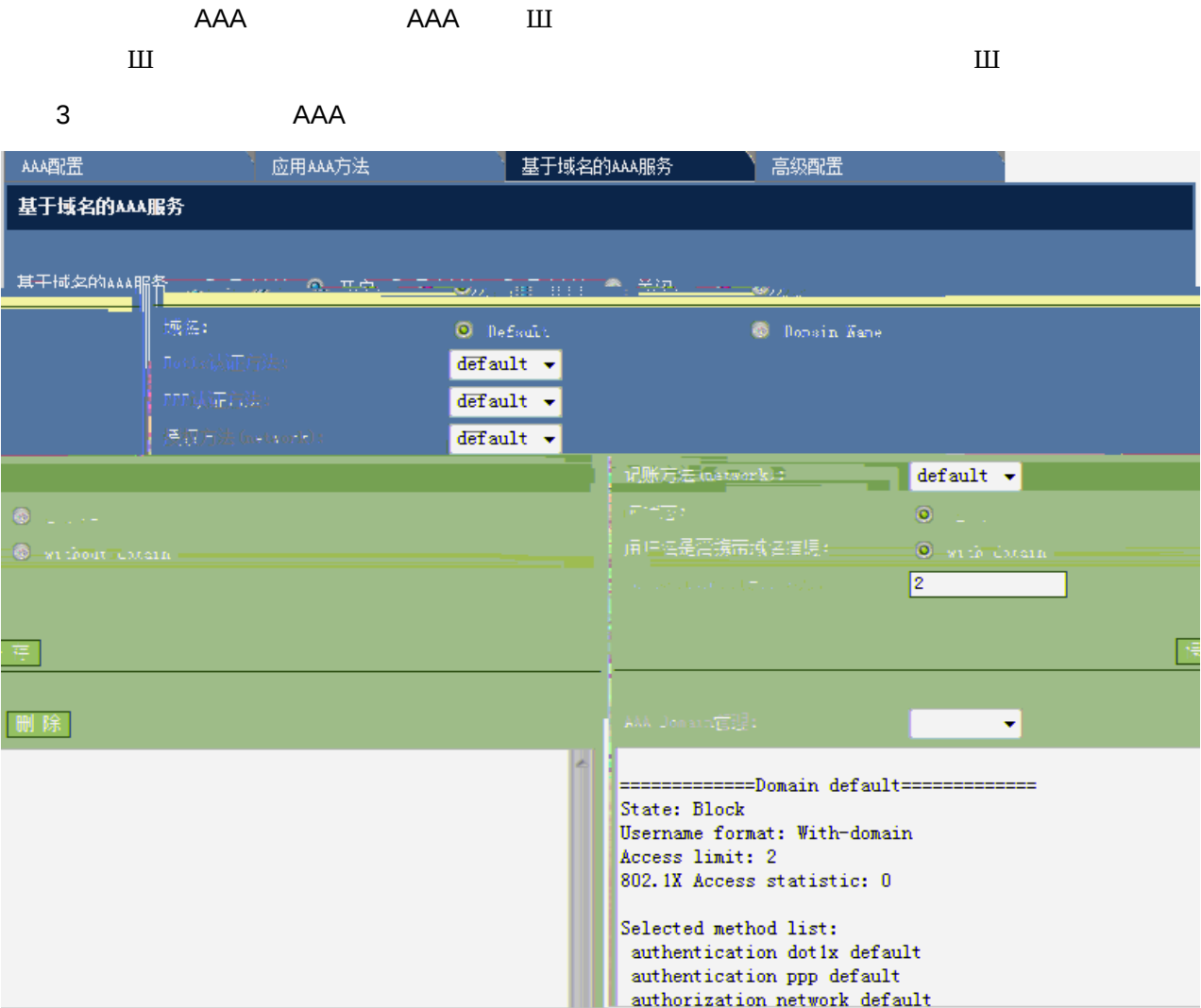
Accounting port:1813

State:Active



53 AAA

1 AAA
AAA

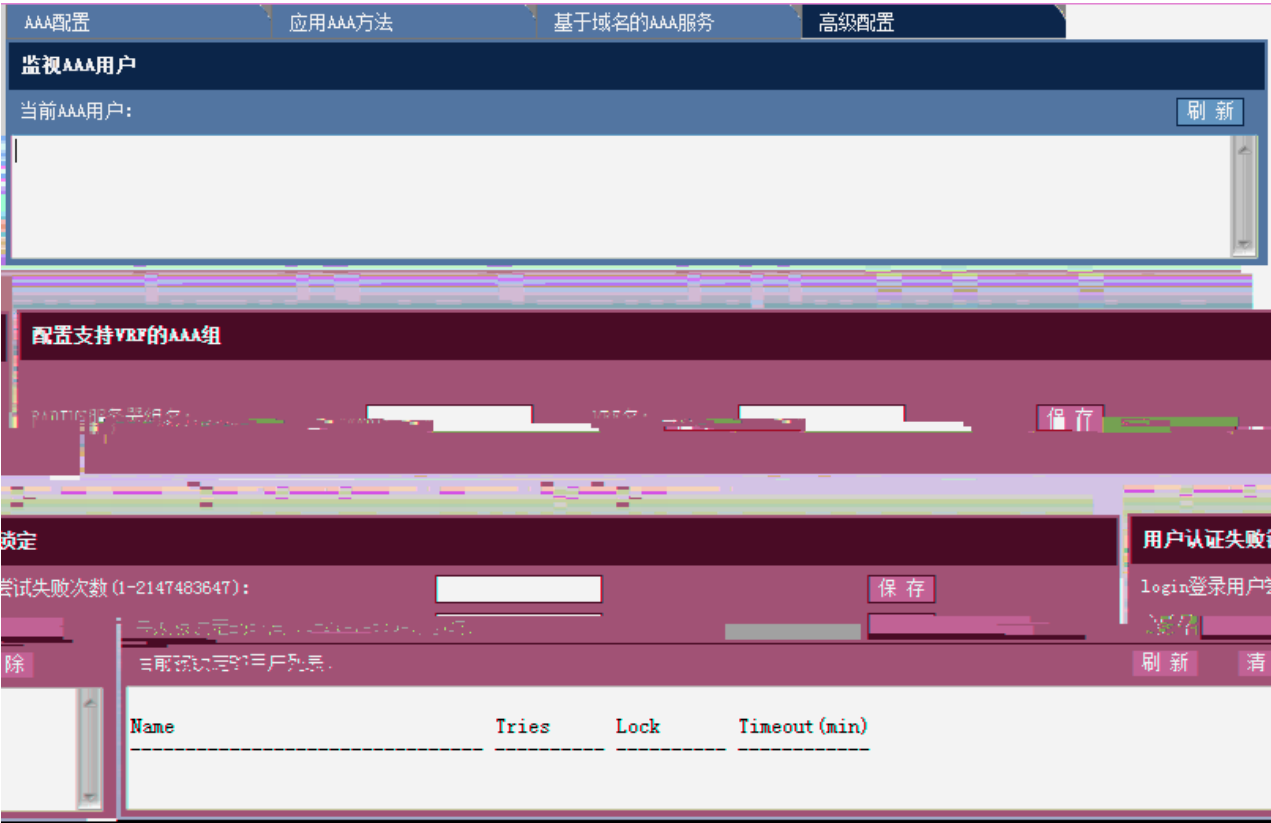


55 AAA Dot1x PPP Access Limit

(network) AAA (network)

AAA Domain

4 AAA



56 AAA

AAA AAA VRF AAA III

2.3.11 Dot1x

I Dot1x II III

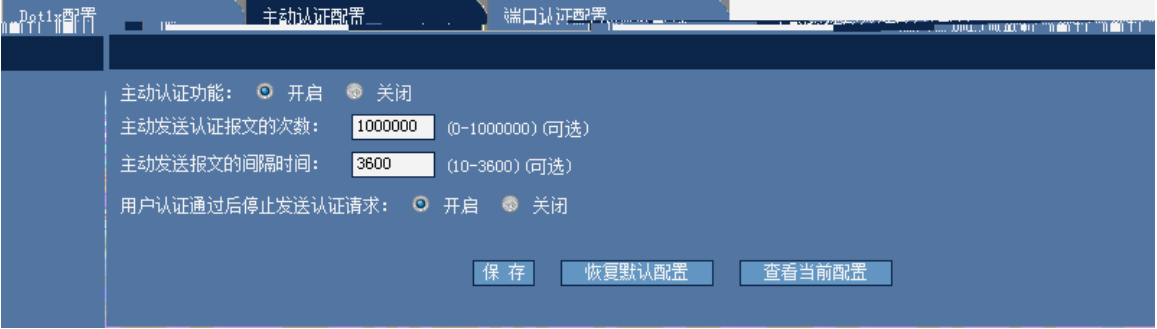
1 Dot1x



57 Dot1x

Dot1x

2



58

3



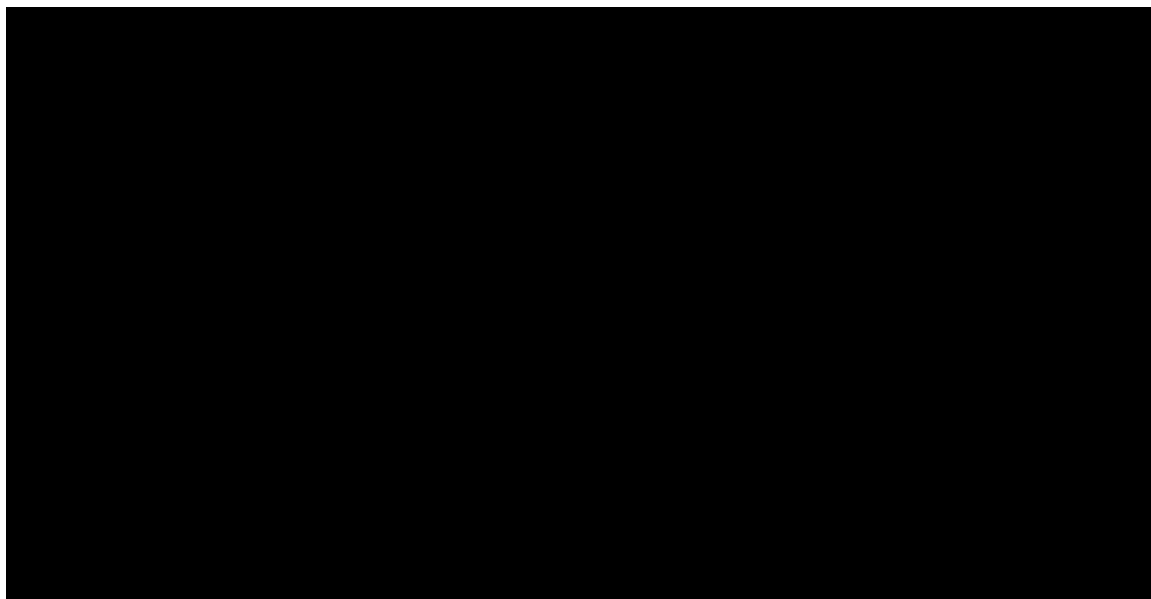
Dot1x

I L

I L

III

I L



2

$$\vdash \quad \mathbb{L}$$

III

802.1x

MAC

$$\vdash \quad \mathbb{L}$$

III VLAN

III

$$\vdash \quad \mathbb{L}$$

2.3.12

I L III

智能绑定

手动查找IP MAC对应信息

通过ARP表查看IP MAC对应信息

序号	IP	MAC	Vlan	操作
1	192.168.23.14	bc30.5bbe.8f4f	1	绑定
2	192.168.23.39	0025.64c5.af05	1	绑定
3	192.168.23.55	001e.ec0e.70ee	1	绑定
4	192.168.23.66	0023.ae86.b116	1	绑定
5	192.168.23.76	00d0.f866.66e0	1	绑定
6	192.168.23.83	0025.64af.cdee	1	绑定
7	192.168.23.93	0025.64c5.8970	1	绑定
8	192.168.23.94	0025.64c5.b2b9	1	绑定

刷新

62 ARP

2.3.13 WEB

I web L III
web

基本设置

免认证资源

免认证用户

应用于端口

显示认证配置和状态

重定向的IP地址:

0.0.0.0

认证页面URL:

重定向端口 (最多可以配置10个, 中间使用英文逗号分开):

80

未认证用户的最大HTTP会话数 (0-255, 可选):

255

每个端口下 (1-85535, 可选):

维持重定向连接的超时时间 (1-10秒, 可选):

3

保存

设备与认证服务器之间的通信密钥:

恢复默认

保存

保存

线用户信息的更新时间间隔 (30-3600秒):

60

恢复默认

提示: 多个Vlan之间使用英文逗号分开, 相连Vlan之间可以用“-”连接

Vlan List:

63 web

- 1) web
- web

HTTP

,

80
- IP

(0-255

)

Web

,

III
- URL

IP,SNMP-Inform

,

Vlan List

III
- 2)



64

IP

III

III

3)



65

IP

III

III

III

4)

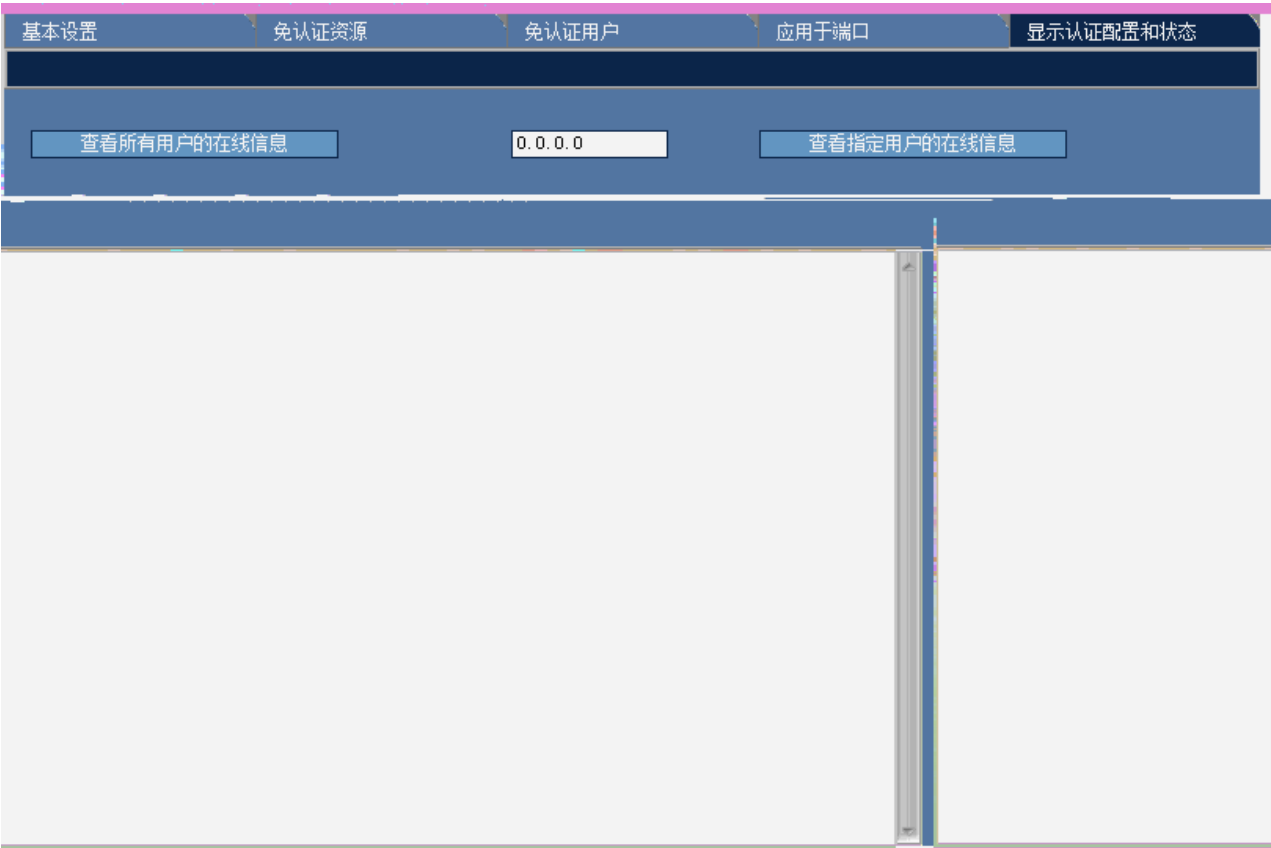


66

III

III

5)



67

IP

III

2.3.14 DHCP Snooping

1 DHCP Snooping 2

III

DHCP Snooping

DHCP Snooping 设置

说明：DHCP Snooping就是DHCP窥探，通过对Client和服务器之间的DHCP交互报文进行窥探，实现对用户的监控，同时DHCP Snooping起到一个DHCP 报文过滤的功能，通过合理的配置实现对非法服务器的过滤。

☒ 开启DHCP Snooping功能	☐ 关闭DHCP Snooping功能
☒ 开启DHCP源MAC检查功能	☐ 关闭DHCP源MAC检查功能

DHCP Snooping 信任端口设置

端口：

DHCP Snooping配置信息		
限速	端口	信任端口

68 DHCP Snooping

1)DHCP Snooping

DHCP Snooping DHCP Snooping MAC
I L III
2)DHCP Snooping

I L III
I L III

2.4 QOS

2.4.1

I L III

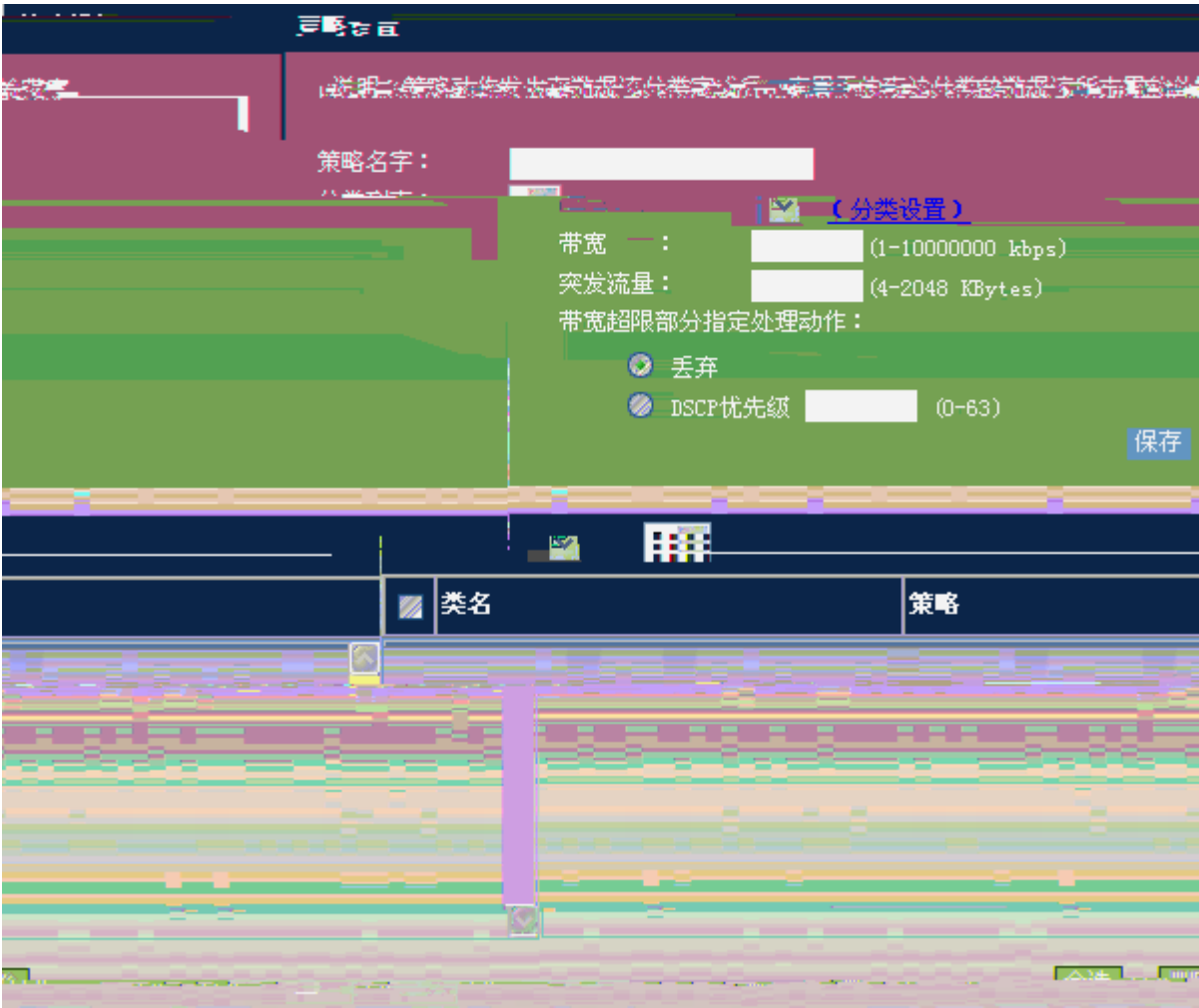


69

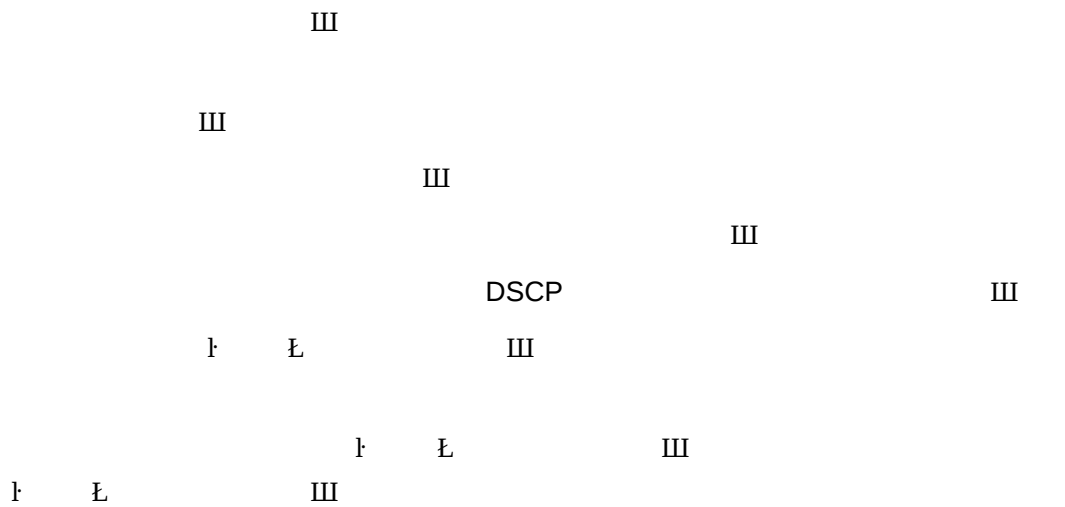
ACL I L III
I L III

2.4.2

I L III



70



2.4.3

I L III

流设置

说明：应用策略设置对端口的输入或输出流进行限制。

端口：

FastEthernet 0/1

策略列表：

（策略设置）

限速方向：

☒ 输入限速

☐ 输出限速

保存

☐	端口	方向	策略名	信任模式	COS
☒	FastEthernet 0/1	-	-	-	-
☒	FastEthernet 0/2	-	-	-	-
☒	FastEthernet 0/3	-	-	-	-
☒	FastEthernet 0/4	-	-	-	-
☒	FastEthernet 0/5	-	-	-	-
☒	FastEthernet 0/6	-	-	-	-
☒	FastEthernet 0/7	-	-	-	-
☒	FastEthernet 0/8	-	-	-	-
☒	FastEthernet 0/9	-	-	-	-
☒	FastEthernet 0/10	-	-	-	-
☒	FastEthernet 0/11	-	-	-	-

全选

删除

71

III

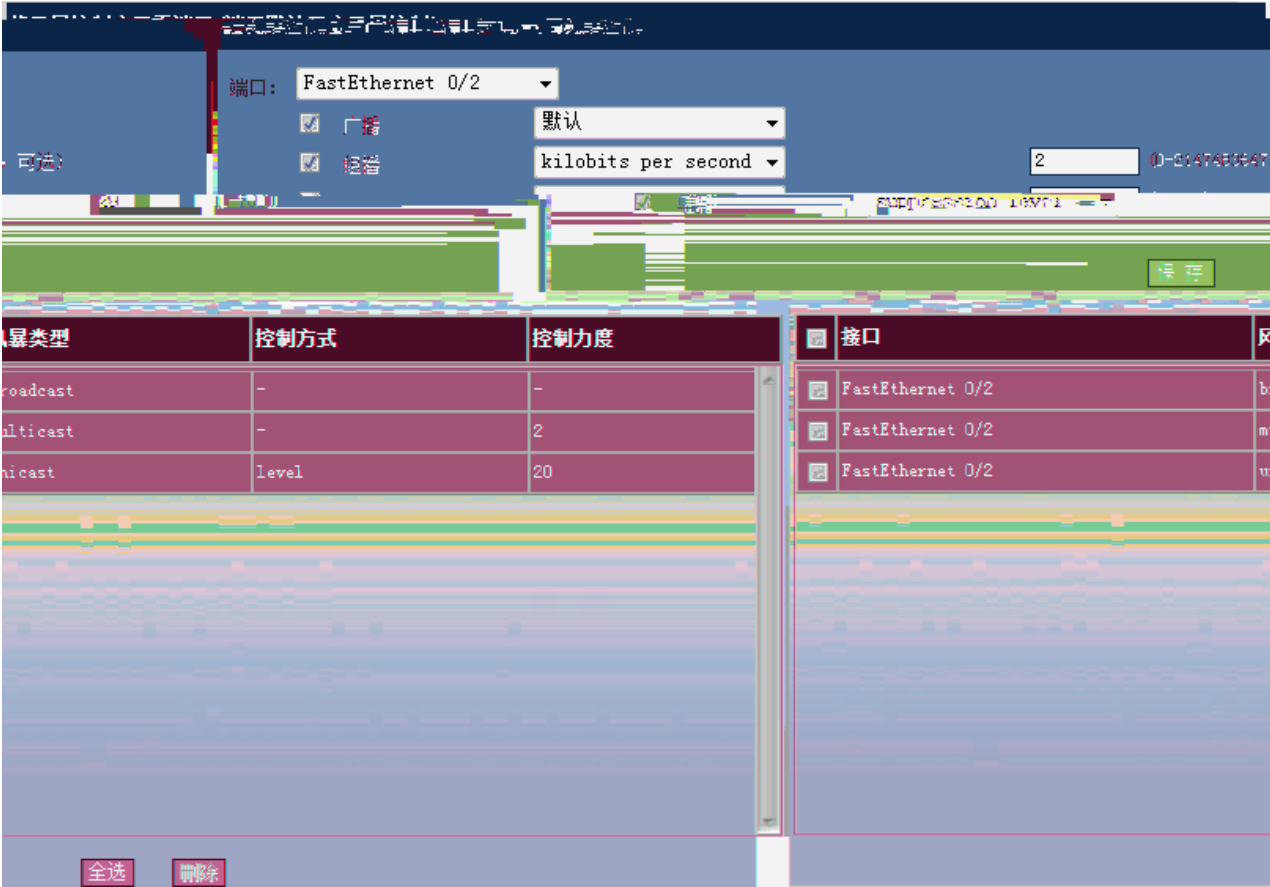
III

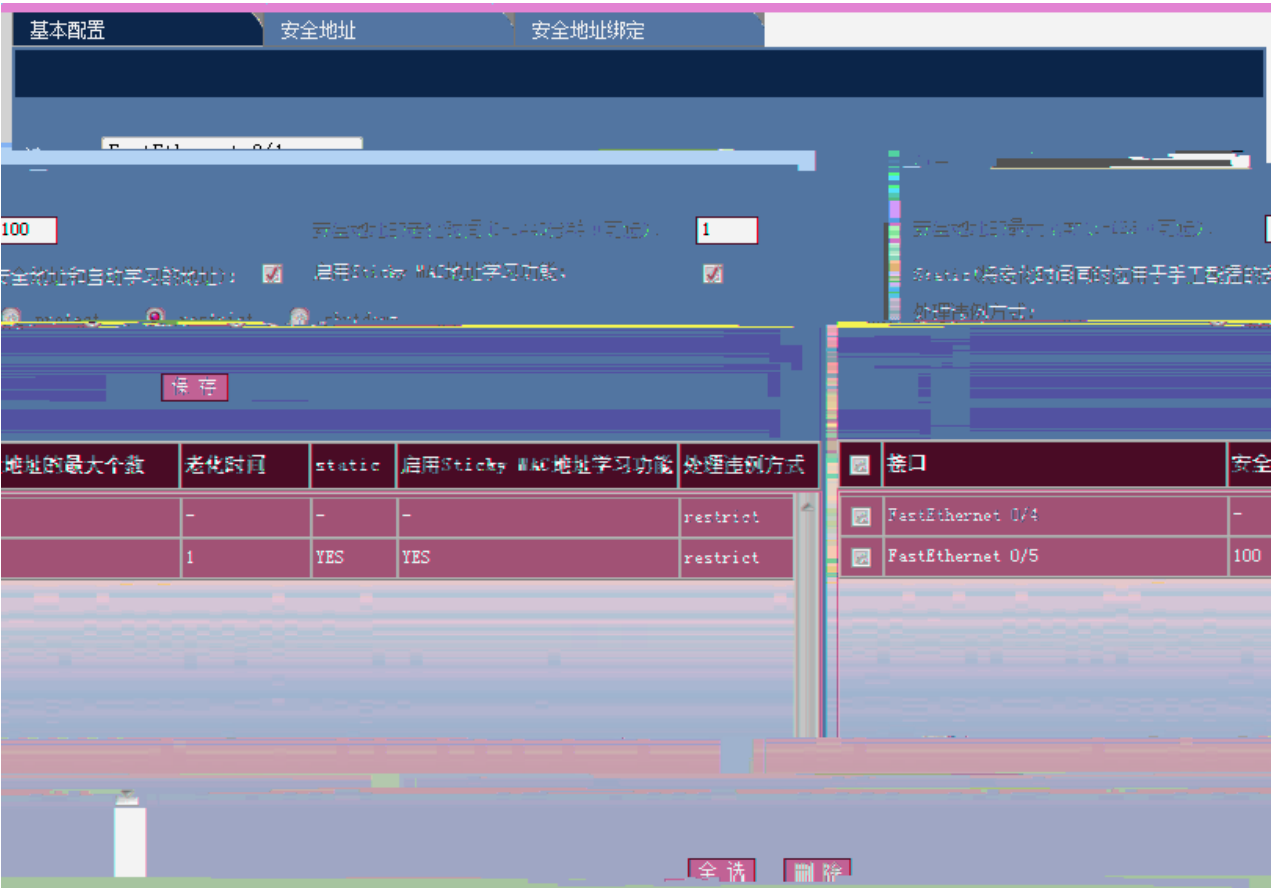
III

I L III
I L III

2.4.4

I L III





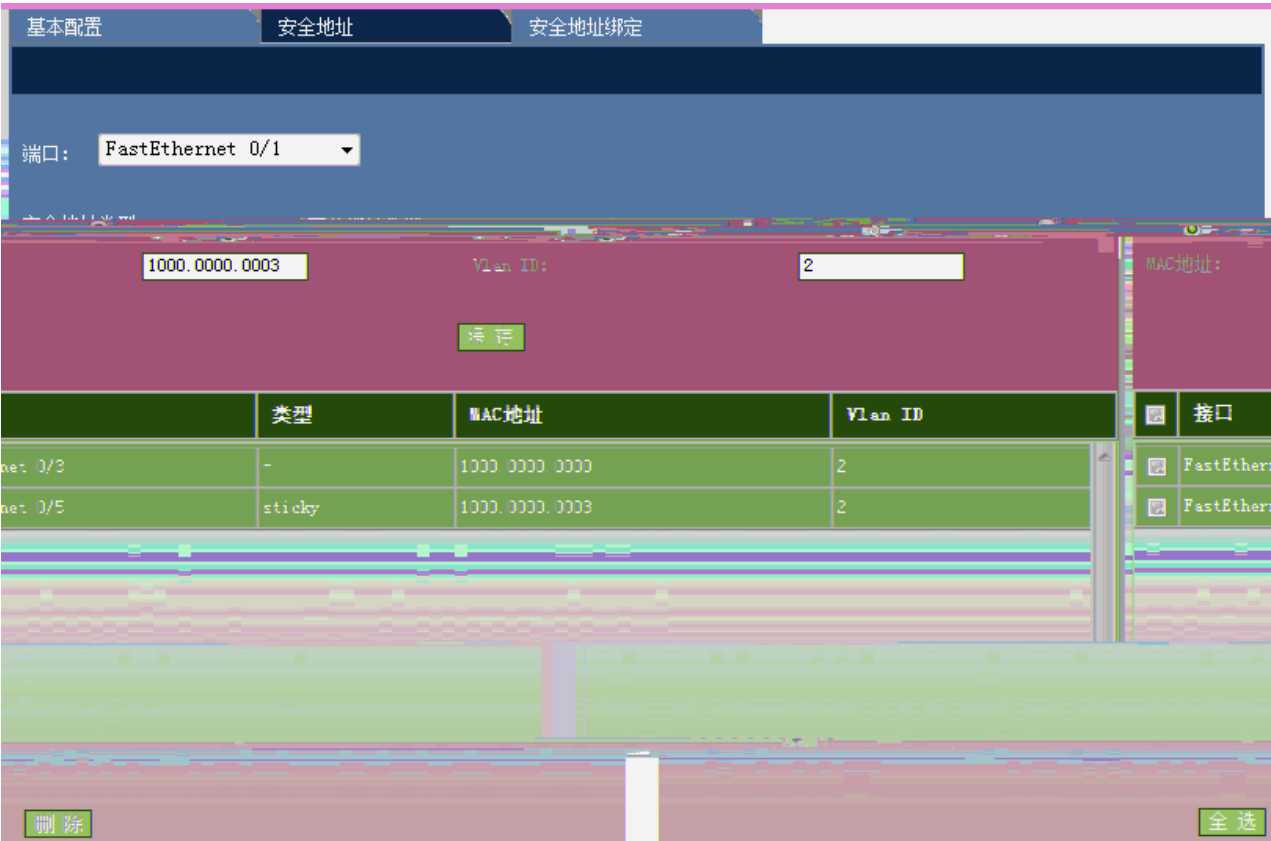
73

- 1)
- Static

Sticky Mac

III

III
- 2)



74

Mac VLAN ID

III III

3)

基本配置

安全地址

安全地址绑定

端口: FastEthernet 0/1

IP地址 (IPv4或IPv6): 1.2.3.3

将MAC及Vlan进行绑定到安全端口: ☒

MAC地址: 1000.0000.0000

Vlan ID: 10

保存

接口	MAC地址	Vlan ID	IP地址
FastEthernet 0/1	1000.0000.0000	10	1.2.3.3

全选

删除

系统信息	
设备型号：	S2924G
主机名：	Ruijie
软件版本：	RGOS 10.2.00(3) Release(30355) (Tue Mar 11 19:23:04 2008)
设备名称：	RGOS
系统时间：	2008-03-11 19:23:04

76

2.5.2

I L III

当前配置	
	Building configuration... Current configuration : 12931 bytes
2008 -	! version RGNOS 10.2.00(3), Release(30355) (Tue Mar 11 19:23:04 23195A44470348C) ! ! ! vlan 1 name vlan1 ! vlan 2 ! vlan 3 ! vlan 4 ! vlan 5 ! vlan 6 ! vlan 7 !

77

2.5.3

I L III

端口状态					
端 口	状 态	Vl an	双 工	速 率	端口类型
FastEthernet 0/1	down	1	Unknown	Unknown	copper
FastEthernet 0/2	down	2	Unknown	Unknown	copper
FastEthernet 0/3	up	1	Full	100M	copper
FastEthernet 0/4	down	900	Unknown	Unknown	copper
FastEthernet 0/5	down	1	Unknown	Unknown	copper
FastEthernet 0/6	down	1	Unknown	Unknown	copper
FastEthernet 0/7	down	1	Unknown	Unknown	copper
FastEthernet 0/8	down	1	Unknown	Unknown	copper
FastEthernet 0/9	down	1	Unknown	Unknown	copper
FastEthernet 0/10	down	1	Unknown	Unknown	copper

刷新

78

2.5.4

I L III

端口运行状态	
端 口	带宽占用
FastEthernet 0/1	0%
FastEthernet 0/2	0%
FastEthernet 0/3	0%
FastEthernet 0/4	0%
FastEthernet 0/5	0%
FastEthernet 0/6	0%
FastEthernet 0/7	0%
FastEthernet 0/8	0%
FastEthernet 0/9	0%
FastEthernet 0/10	0%

刷新

79

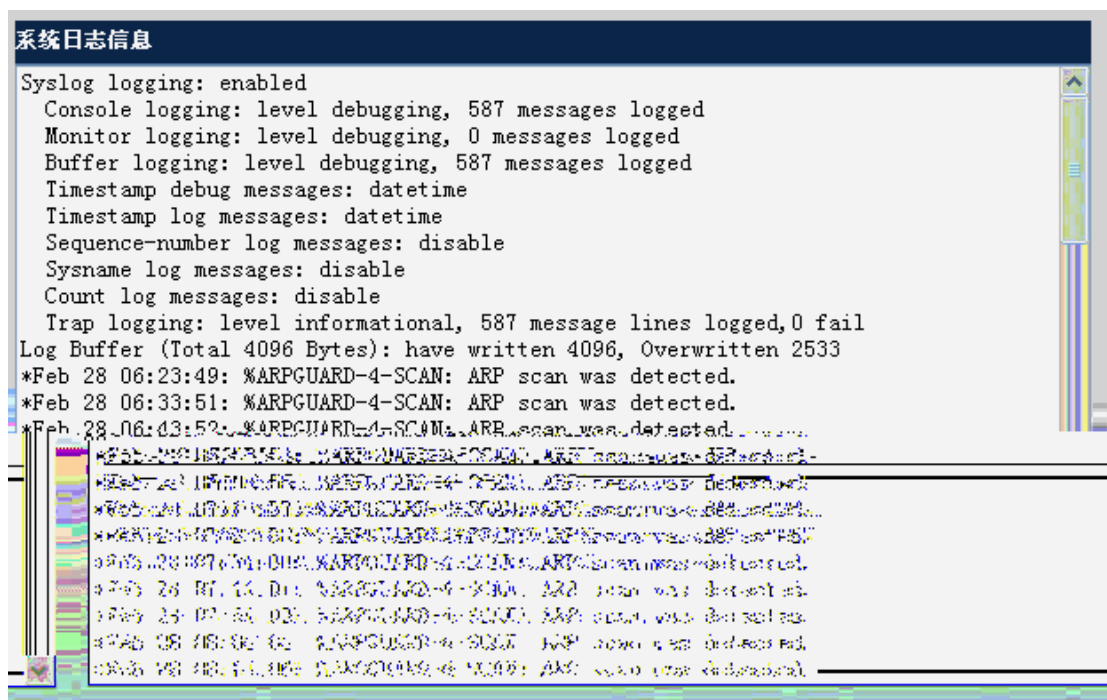
2.5.5

I L III



2.5.6

I L III



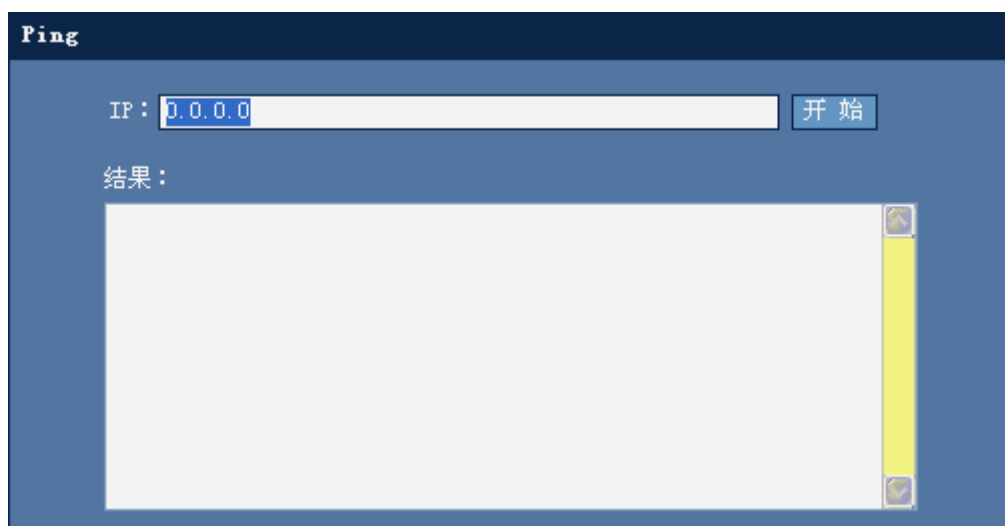
81

2.6

2.6.1 Ping

1. Ping 1 III

Ping



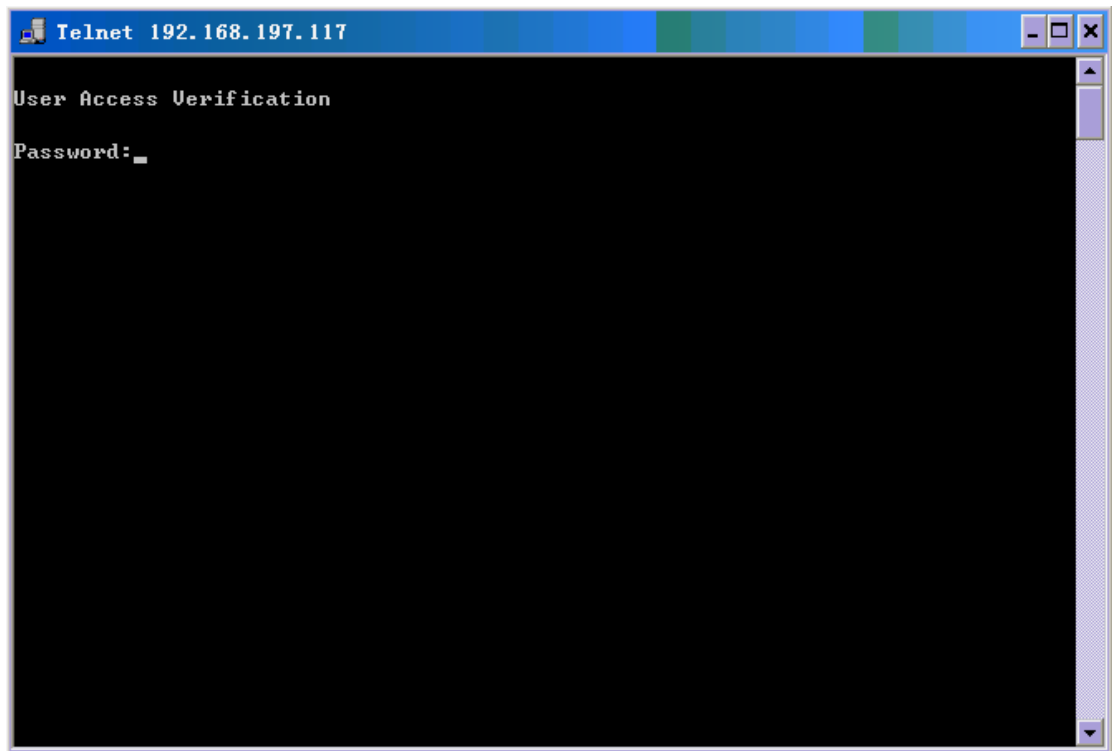
82 Ping

III IP I L IP Ping

2.6.2 Telnet

I Telnet L III

Telnet

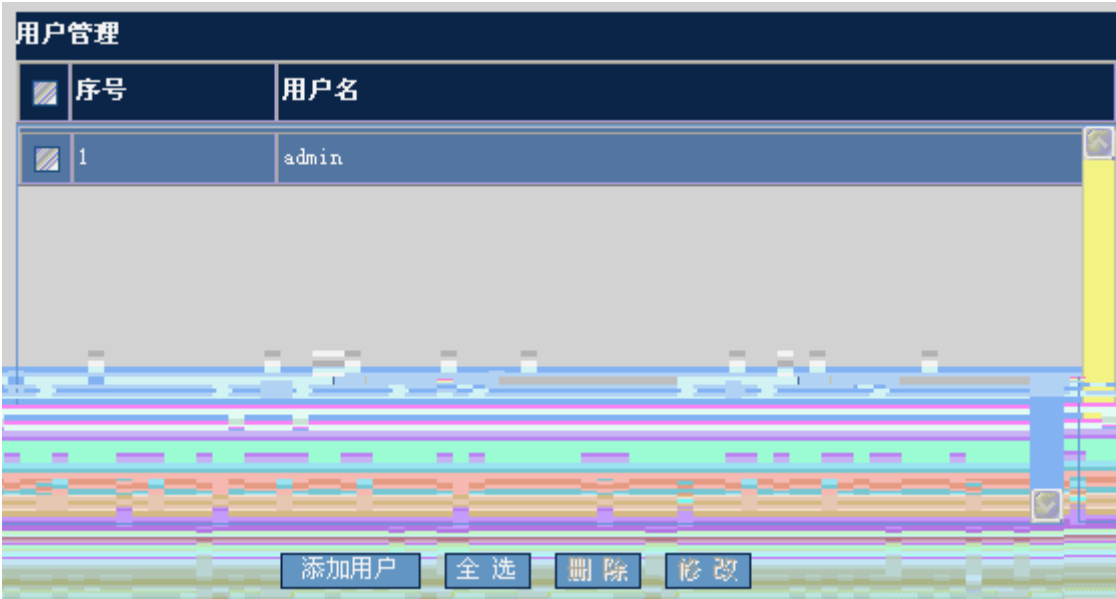


83 Telnet

PC Telnet I Telnet L Telnet III PC Telnet

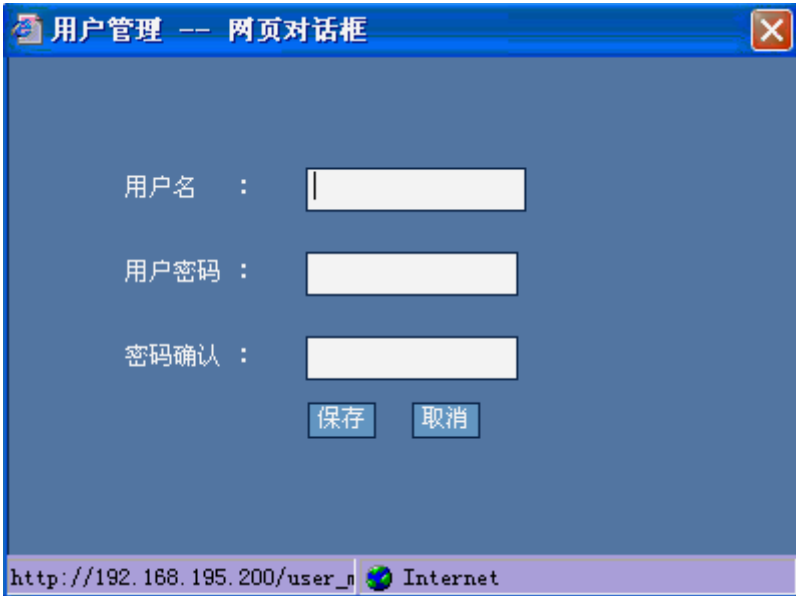
2.6.3

I L III



84

I L



85

I L III

III

I L III
I L

2.6.5 /

I / L III
/



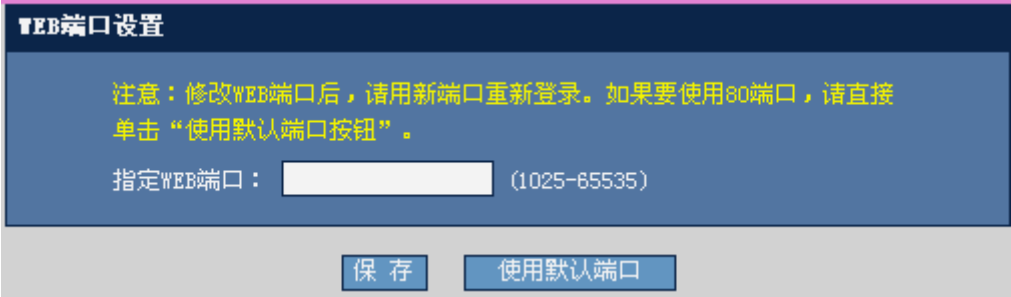
89 /

q config.text TFTP IP TFTP
I L III

2.6.6 WEB

I WEB L III

WEB



90 WEB

2.8 WEB

2.8.1

2.8.2

2.8.3

WEB WEB enable III

2.8.4

WEB Local Enable WEB
WEB WEB III Local


```
!  
!  
line con 0  
line vty 0 4  
  login  
!  
!  
end
```

2 Enable

Ruijie(config)#show running-config

Building configuration...

Current configuration : 2014 bytes

```
!  
version RGOS 10.2(4), Release(55435)(Wed May 13 11:50:07 CST 2009 -ngcf32)  
vlan 1  
  
no service password-encryption  
!  
enable password admin                //WEB     Enable  
enable service web-server           //     WEB  
!  
....  
.....  
!  
interface VLAN 1  
  
  ip address 192.168.100.1 255.255.255.0   //     IP  
  no shutdown  
!  
!  
line con 0  
line vty 0 4  
  login  
!  
!  
end
```