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|---|---|---|---|
| 2012-06 | V1.0 | | |
| 2015-03 | V1.1 | | |
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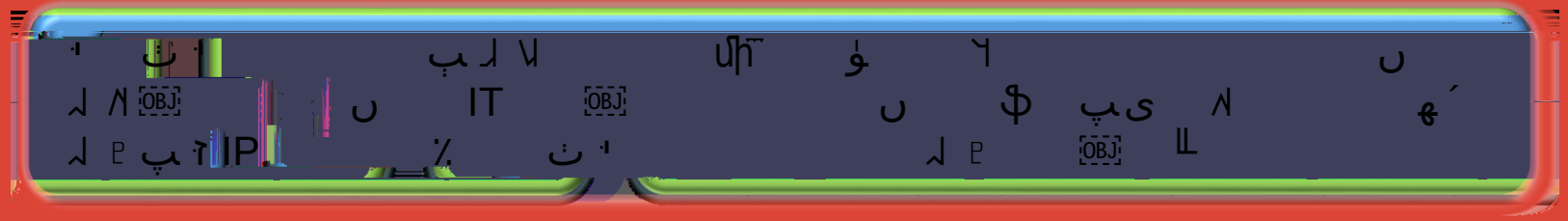

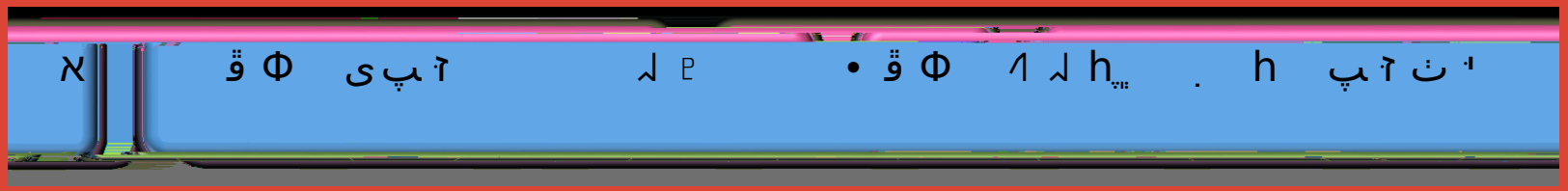

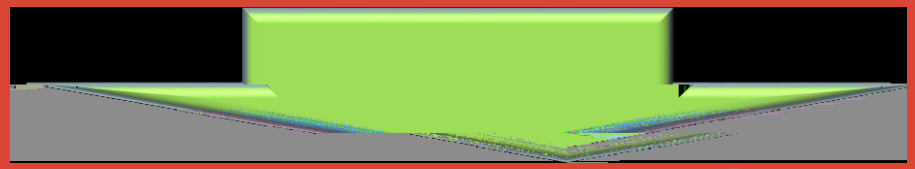

RSR20
RSR20-14E/F

MSTP

But

# Contents


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| ° ´ | RSR20-14E |
|---|---|
| ڶ ب ل | 1 Console 1 AUX 1 USB 1 SD 1 ۃ أ ۼ 24<br>10/ 100 ل 2 ɔ 2 SFP 2 ɔ ۃ |
| SIC Rs | 4 ۃ ⋮ ـ ا ب ل 4 SIC |
| BOOT ROM | 8MB |
| NAND FLASH | 128MB |
| DDR II | 512MB |
| (W×H×D) | 440mm×43.6mm×300mm (1U) |
| ڑ ɔ | AC100 240V 50~60Hz |
| ǎ | 50W |
| ע □ | 0 45 |
| ע □ | -40 70 |
| ► | 10 95%RH |

| | | | |
|---|---|---|---|
| 1 | SLOT 2 | 2 | SLOT 3 |
| 3 | SLOT 4 | 4 | SLOT 5 |
| 5 | ɔ ◊ | 6 | ɔ ◊ |
| 7 | | 8 | |

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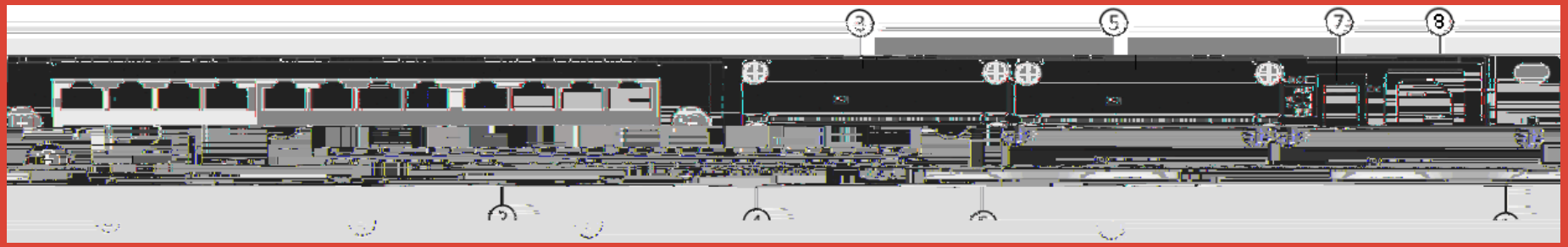


| | | | |
|---|---|---|---|
| 1 | SLOT2 | 2 | SLOT3 |
| 3 | SLOT4 | 4 | SLOT5 |
| 5 | SLOT6 | 6 | |
| 7 | | 8 | |

# RSR20-14E/FW ﾉ

- SIC
  - SIC-1HS
  - SIC-1E1-F
  - SIC-ISDN-S/T
  - SIC-1B-U
  - SIC-8A
  - SIC-2FXS
  - SIC-2FXO
  - SIC-1CE1
  - SIC-3G-TD
  - SIC-3G-WCDMA
  - SIC-3G-CDMA
  - SIC-SEC
- NMX
  - RSR20-14F(V1.X ) NMX-24ESW

ﾉ [OBJ] Ł ت ą Ł

ð RSR20 SIC p Rs ت ٣ Rs ز ‰
├ ⅛ Rs ĩ 1 SIC Rs 1 SIC

SIC ٦ 1 ٧ f

| 类型 | RSR20-14E 支持的 SIC 线卡 |
| --- | --- |
| A 类 | SIC-4BSV、SIC-4BLV、SIC-1B-S/T、SIC-2EXS、SIC-2EXC、SIC-2FC、 |
| DMA、SIC-3G-WCDMA、 | B 类 SIC-1HS、SIC-3G-1D、SIC-3G-C |
| | C 类 SIC-1CE1、SIC-1E1-F |
| | D 类 暂无支持的 D 类卡 |

| ₦ ₌ ڜ | RSR20-04 | RSR20-14 | RSR20-24 | RSR20-14E | RSR20-14F |
|---|---|---|---|---|---|
| Consol/AUX | 2 ` ♀. | 2 ` ♀. | 2 ` ♀. | 2 ` ♀. | 2 ` ♀. |
| ≠ | 2FE | 3FE | 2FE | 2GE ≠ ∀ | 2GE ≠ ∀ |
| | 0 | 0 | 0 | 2 | 1 |
| ≠ | 0 | 0 | 0 | 24FE | 48FE |
| ˜ ~ | 4 | 24 | 52 | 24 | 48(v2.x` )<br>72(v1.x` ) |
| SD/CF | 0 | 0 | 0 | 1 | 1 |
| USB | 0 | 2 | 2 | 1 | 1 |
| SIC † | 4 | | | | |
| | | | | | |

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  س ₩ لـبـ
- لـبـOBJ لـبـOBJ ٧
- ₩ لـبـ ﻝ ٨ ٤ SVI

4 ٬

- RSR20-14E : fastEthernet 1/0 - fastEthernet 1/23
- RSR20-14F : fastEthernet 1/0 - fastEthernet 1/47

NMX-24ESW ٧ ₱

- أ ث ٠ ٹ ـِ لـبـ أ أ ` لـبـ
  ð ث ٠ ٹ ـِ
- NMX-24ESW أً RSR20-14F ð لـبـ ـ SVI ٤
  لـبـ
- RSR20-14F ð̈ RSR20 ٤ OBJ ـ OBJ ` OBJ ð̈
  RSR20 ـ service-module fastEthernet 2/0 session
- RSR20-14F ؟ ٧ ' ˚ ´ گ أ إ ـد
  أ OBJ ■ . ٧ ڤ ڈ ئ ک ا RSR20 ث ٠
  أ ـ V1.2.doc

## ₩ بـ لـ أ

vlan

```
Ruijie(config)#vlan 2
Ruijie(config-vlan)# name ا ـ لـ
Ruijie(config-vlan)#!
Ruijie(config-vlan)#vlan 3
Ruijie(config-vlan)# name ð إ ˇ
Ruijie(config-vlan)#!
Ruijie(config-vlan)#vlan 4
Ruijie(config-vlan)# name إ ـ
```

ˆ vlan

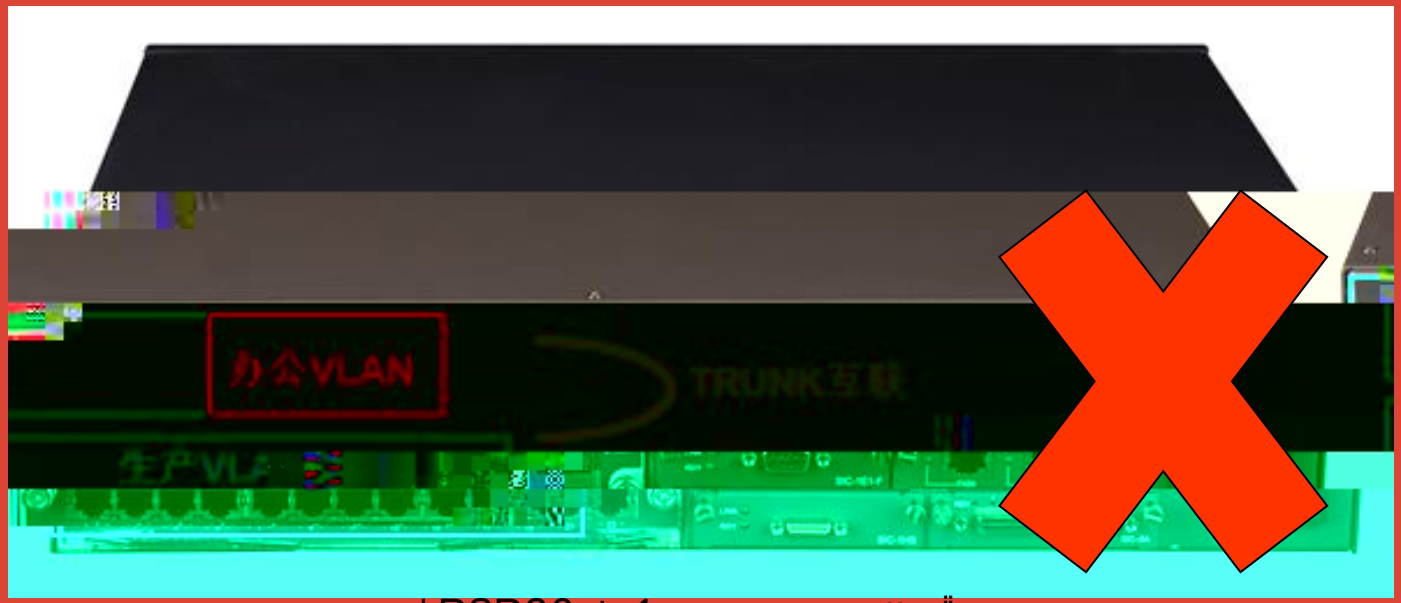
```
Ruijie(config)#interface fastEthernet 1/0
Ruijie(config-if)#switchport access vlan 2
Ruijie(config)#interface fastEthernet 1/1
Ruijie(config-if)#switchport access vlan 3
Ruijie(config)#interface range fastEthernet 1/2
- 4
Ruijie(config-if-range)#switchport access vlan
4
//      range[OBJ]بـ لـ
```

SVI

```
Ruijie(config)#interface VLAN 2
Ruijie(config-if
```

⁴ ٹ ڑ ڈ ٥ ف ٨ trunk ٧ ٨ ٧ ٨

- ð̈ RSR20 VLANٹ Ц




ٮ RSR20ف ٨ ۊ ۑ

ð̆ RSR20ٹ ۱ Ă ˃ V1.2.doc

## ⁴ ᵘ ⅄

- VLAN/TRUNK
- ᵎ AP
- ⅄ IP ⅃
- ⅄ ᔑ ᔕ
- 802.1X ɲ -
- ı ‴

## ⁴ ᵑ ᵘ ⅄

- ᔑ ⅃ ᵔ ᵗ
- ⅄ ᔑ
- RLDP
- IGMP SNOOPING
- ACL

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Show cpu ´H

show cpu ج₩ ŕ CPU° ◊ڤΦ ﾉ ɯ ' ﻩ ا ج° ◊ ﾉ ɯ

ن ص ٨

Ruijie(support)#ef_statics_switch ?
<0-1> 0-1

0 ڎ ج° ◊ ﾉ ɯ
1 ج° ◊ ﾉ ɯ

↕ ج ج Ω ∩ ن ۱ Ն ج show cpu ج Pts Վ پ

ن ۱ Ն

OAM

cpu

**RSR20-14F#show temperature**
Device Temperature(C)
------ --------------
CM 42
RSR20-14F#sho environment

Environmental status update at 13:29:13 1993-03-04.
Data is 18 second old, refresh in 20 second(s).
Power Supplies:
Fans working status:
Fan 1 is on.
Fan 2 is on.
Temperature readings:
measured at 42 C
Hardware:
CPU name: OCTEON.
CPU Speed : 500M

RSR20-14E

E1 ♩ ╒ ≡

20-14E/F ◦ ŕ FPGA א cpm ΐ FPGA א ע ע

ℓ loopback DTE ٦ ΐ Φ ع ب ـل

# ۹ ۸ ۷ ’ ۸ Ạ

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  پ OBJ ⅄ ≡
  ~ OBJ ɓ © ≡ ¡

ħu ق Ệ ŧ Åض
’ ۸ ɔ مي ’ ~ OBJ ţh `
ֆ كم ˝H

## ˝ ¡ ۱ ک ` ۱RSR20

### ₱

گ گCPU ת 1 ۶ ف Φ ں ھ ת ز گ ₿ ۽ گ
CPU ת ۳ CPUح ă ھ ں ۶ OBJ چ

### ₹

ہ ز ۱ ں ھ * أ OBJ ں ھ ă * OBJ چ
⅝ * OBJ ם گCPU ת ن ۸ ۷ ע OBJ
□ أ گ ڈ ת RSR77ں ₱ أ

### ₹ Ạ

- گCPU ת ۷ CPUح OBJ
- ۱ ₿ گ ک ب۷ ۵ ۷ ۸ ؛ ۶ أ ۷
  ⅝ ۷* ⅛ ۶ أ ARP 10 ۵ ب۷

```
control-plane manage
port-filter
 arp-car 10
 no acpp
```

گ

ف ۱ ۲ ۞

control-plane
!
control-plane protocol
 no acpp //
!
control-plane manage
 no port-filter //
 UDP
 no arp-car //arp
 no acpp
!
control-plane data
 no glean-car //
 IP
 no acpp

ۣ ف ۱ ' ا گ e ۽

ا ∂ ل ب

control-plane
!
control-plane protocol
no acpp
!
control-plane manage
port-filter
 arp-car 10
 no acpp
!
control-plane data
glean-car 5
 acpp bw-rate 300 bw-burst-rate 600

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• ɻ ʎ # ﻭ ɻ ʎ ɻ ʎ ↑ OBJ h
• א ɻ ϕ ب ɻ # ﻭ א ɻ ϕ ب ɻ ■ OBJ א ɻ ق Φ
• א ɻ ϕ OBJ ج ث ف ↑ # ɹ א ɻ OBJ ج ث ↑ ɲ
• א ɻ ϕ OBJ ث ۱ # ɹ א ɻ OBJ ث ۱ ɲ h ث ۱ ٨ ↑ ث ۱ ـَ ؤ ɻ
• ip h # ɻ ʎ ↑ h OBJ ج ث ɲip
• OBJ ٦ ۱ ↑
• ≠ e ĩ OBJ ɻ ɹ ∂ NAT QOS 3G ٧

# ٧ ٦ ت ك ح



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- ك ح



- ٧ ٦ ت
- ك ح

## ٥ ٣ ٥ ٦ ت

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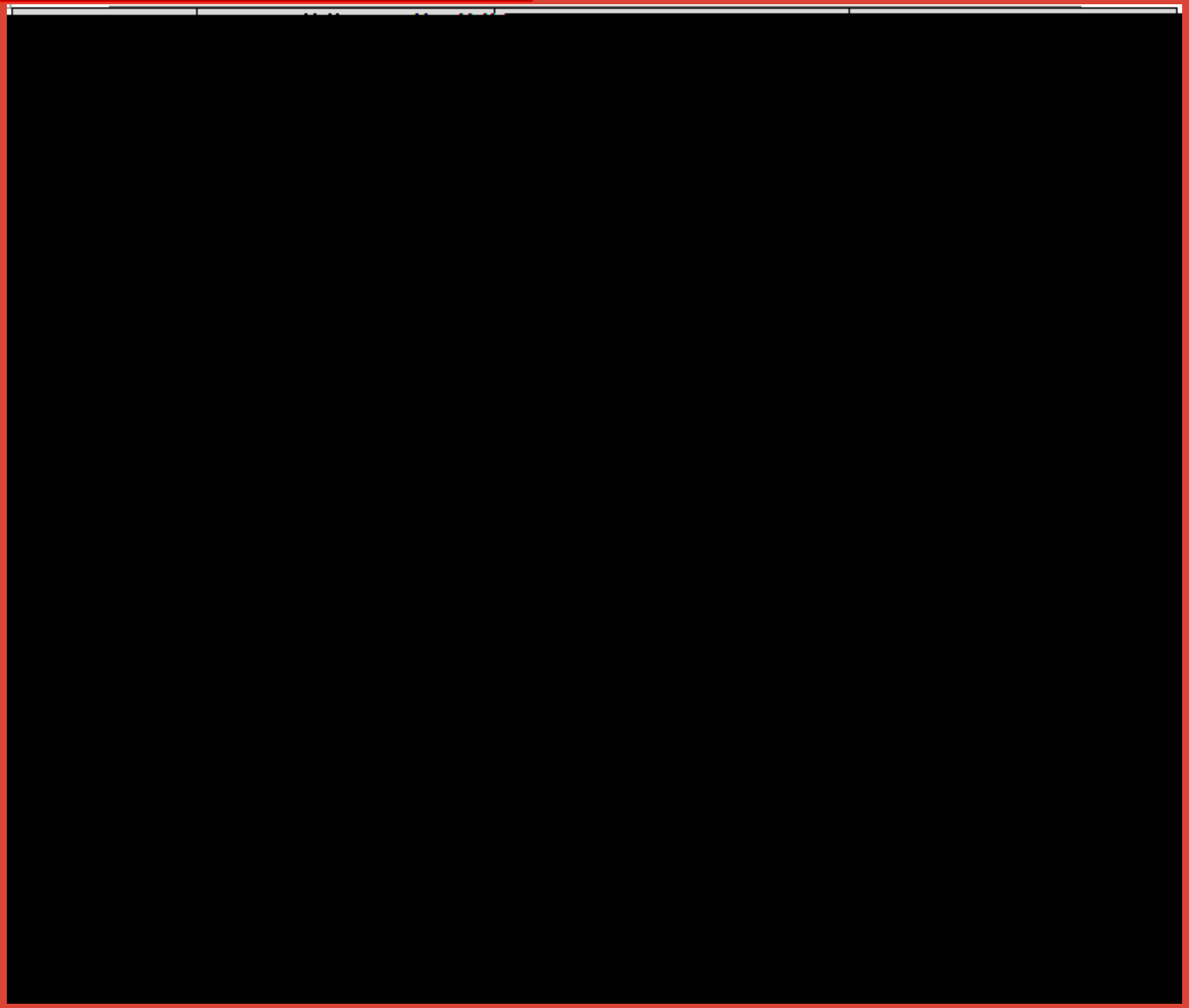
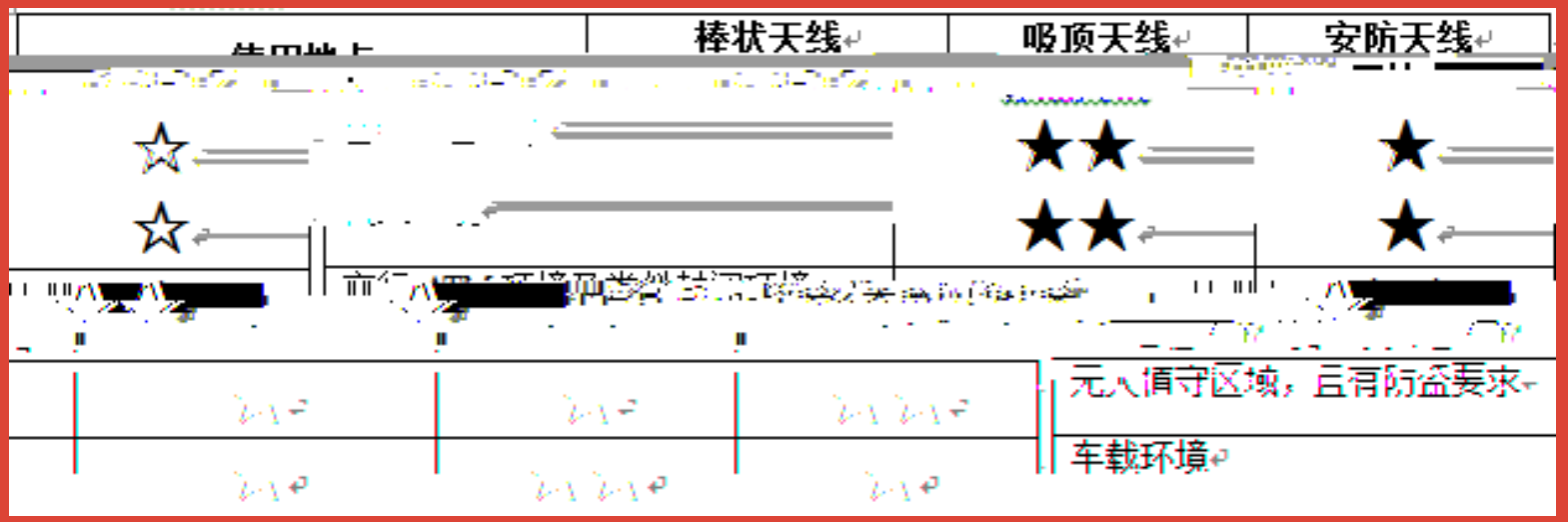
## ٥ ٦ ت ٥ ٦ ٥ ٦ ٥

- ٦ ٢ ١ ٨ ٧ ٦ ٥ ٤ ٣ ٢ ١ ٠ releasenote ك ح PPT



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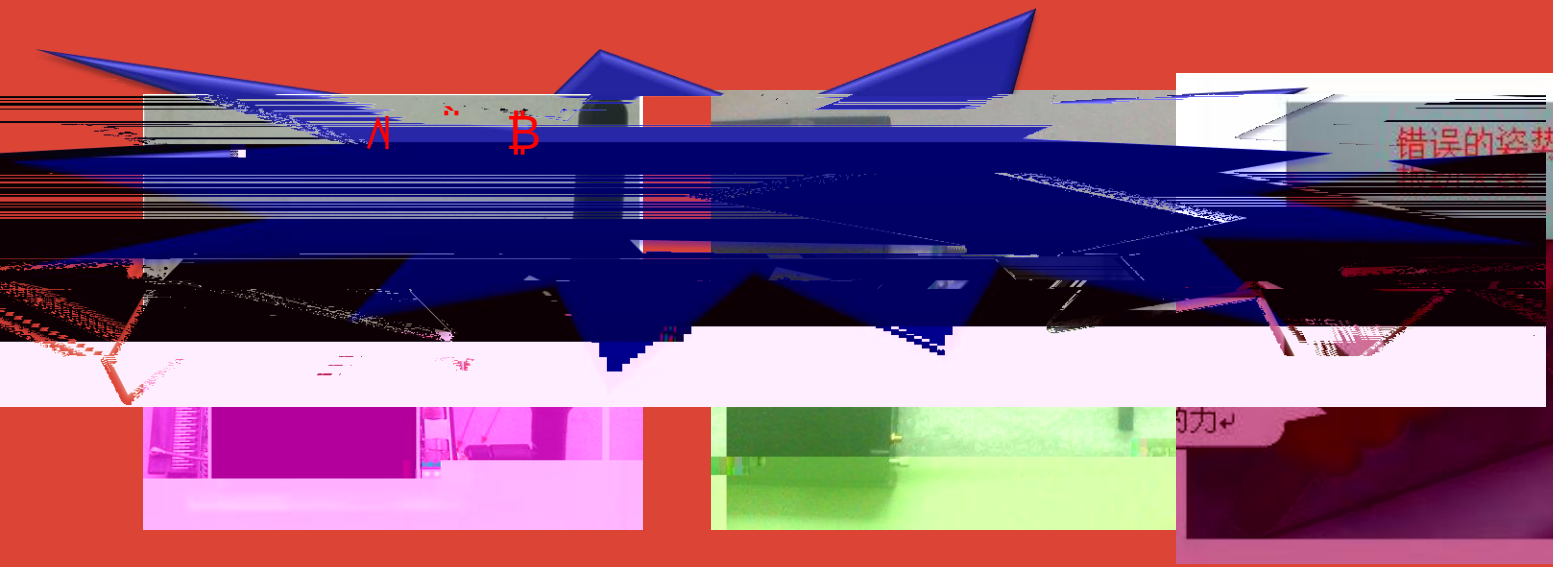
A
B
C
错误的姿势！禁止纵向

- 
- 
- 

- 
- SICRs OBJ 8 %
  Rs OBJ 8 90
  3G

3G

rgos.bin

rgos.bin

tftp

rgos.bin

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RSR

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- ً

## NMX-24ESW ٨ ٨

## SIC-3G ٨

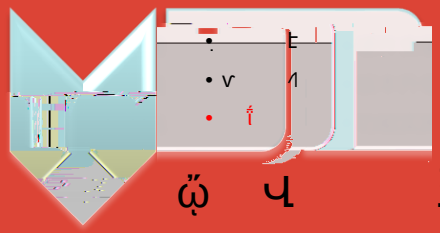
SIC-3G ؤ v ث ٠ ٨ ب ğ ء ب ٦ أً
ڈ ئ ٨ ک ح releasenote n * . SIC-3G ؤ v ٨
| ٦ xmodem tftp

- Xmodem ٨ ڑ ڈ ذ ٨ گ □ ٨
- Tftp ٨ ڑ ~ ℓ ح ⅝ ڈ گ ⅈ ث ٠ ٨ جـ SIC-3G ٨

ؤ SIC-3G ٨ | ├ ° ğ RSR٨ ث ٠ SIC-3G ٨ ٨ .doc

XWRJ(config )#interface f 0/0
XWRJ(config -if-FastEthernet 0/0)#description To_BJ

XWRJ#clock set 12:12:12 1 1 2012



flash

```
XWRJ(config)#logging file flash:log.text 2000000
```

IP loopback 0

```
XWRJ(config )#interface  loopback  0
XWRJ(config -if-Loopback 0)#  ip  add 1.1.1.1 255.255.255.255
```

TELNET telnet

```
XWRJ(config)#enable secret 0 ruijie   //  telnet  enable .
XWRJ(config)#lin vty 0 4
XWRJ(config -line)#password 0 ruijie
XWRJ(config -line)#login
```

```
Router ( config )# service password  -encryption
```

# IP+MAC+ ٧ ٦

- :  Ь
- v  ٧
-  f

h ٣ ٩

٧  +  OBJipmacbind

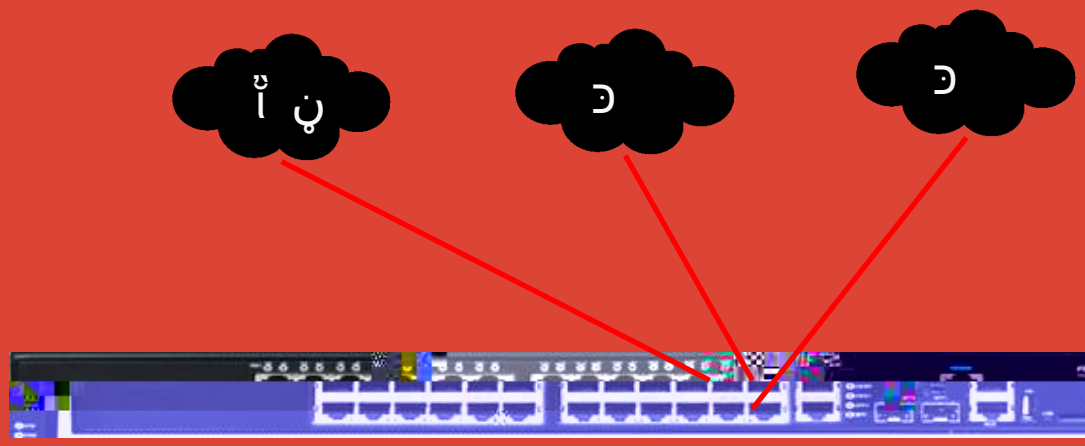
+SVI  OBJACL

- ٧  ٦  MAC+ ٧
- Ipmacbind  ٦  IP  MAC

RSR20-14E/F

3 MSTP

- vlan
- vlan SVI



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# RSR20 ปก

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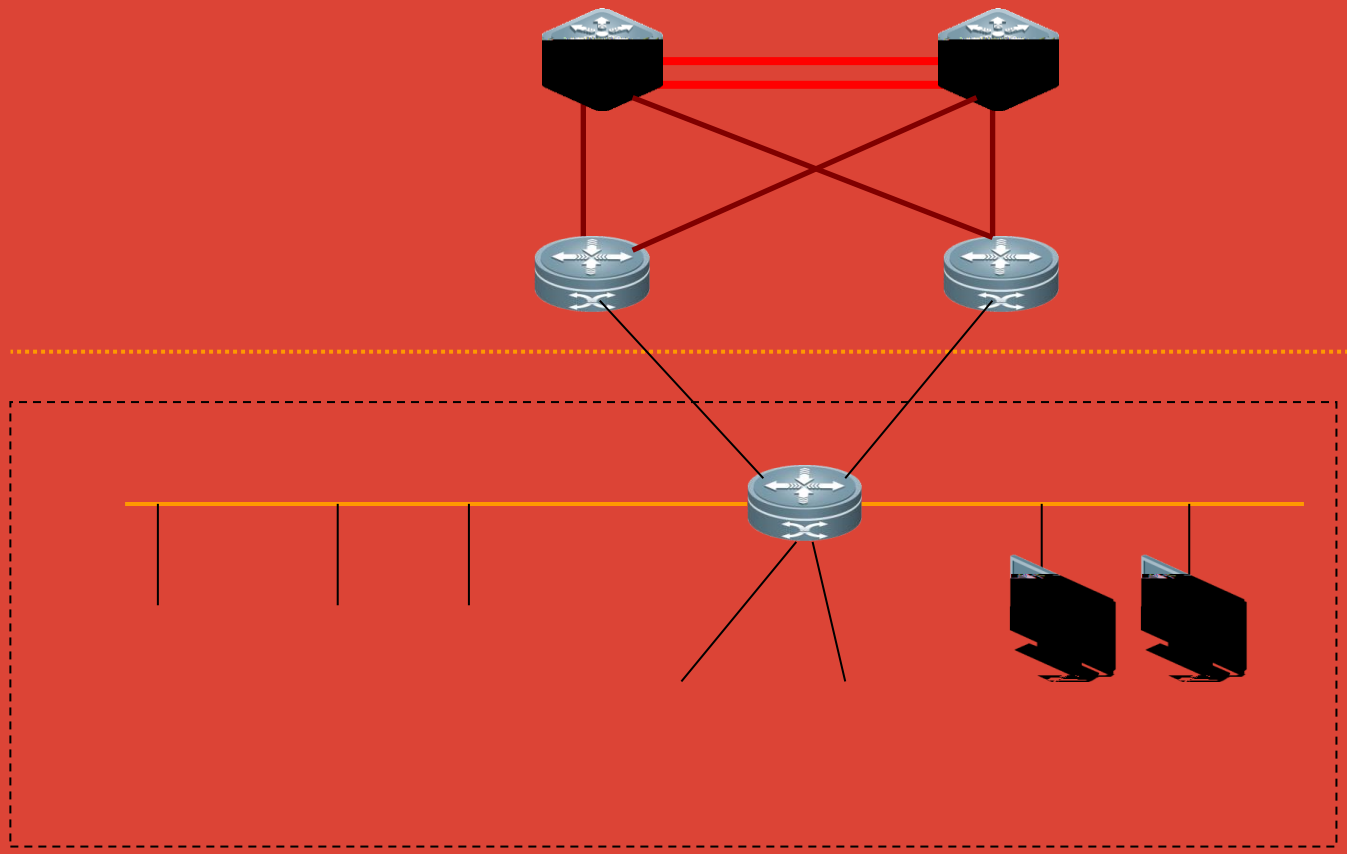
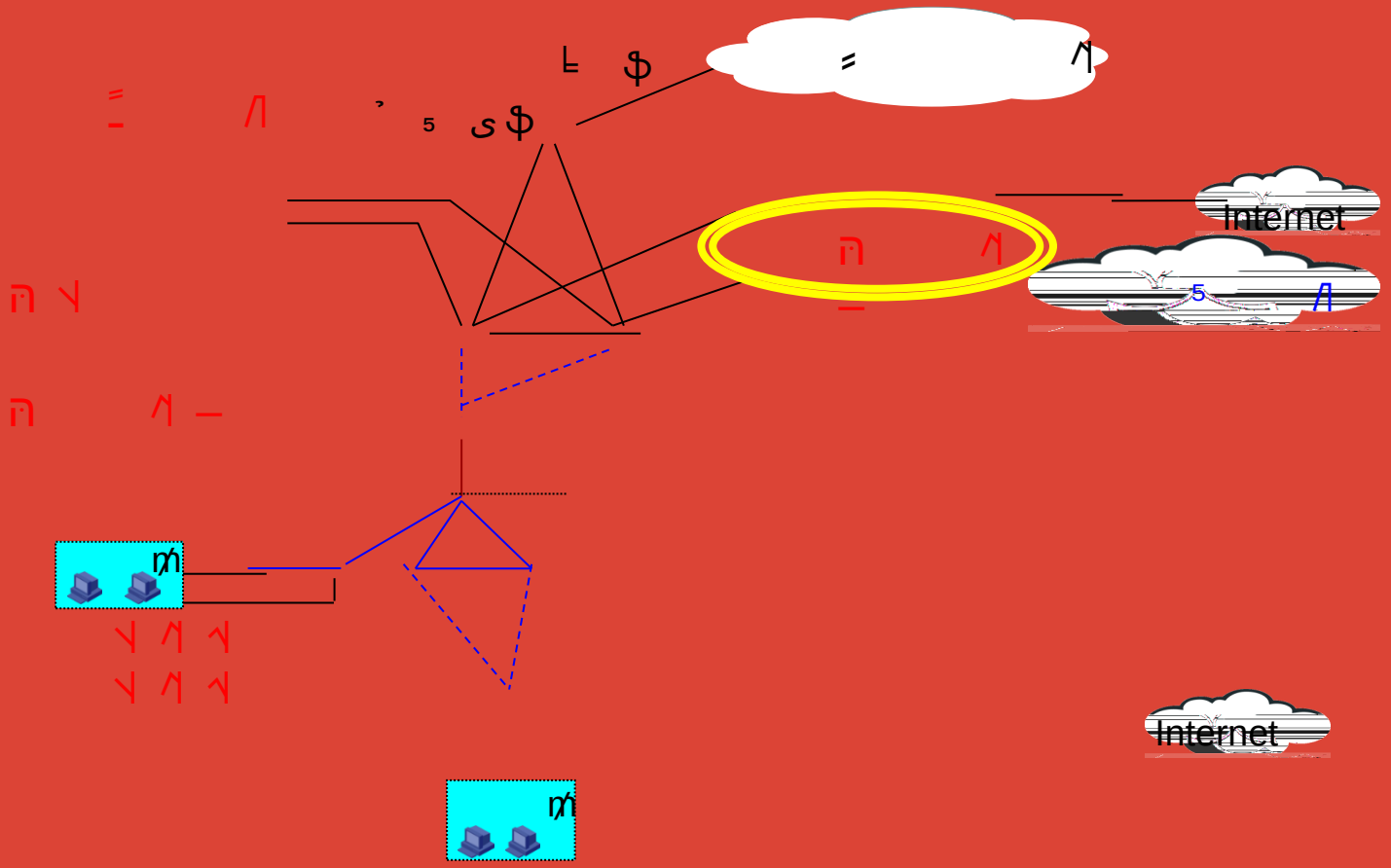
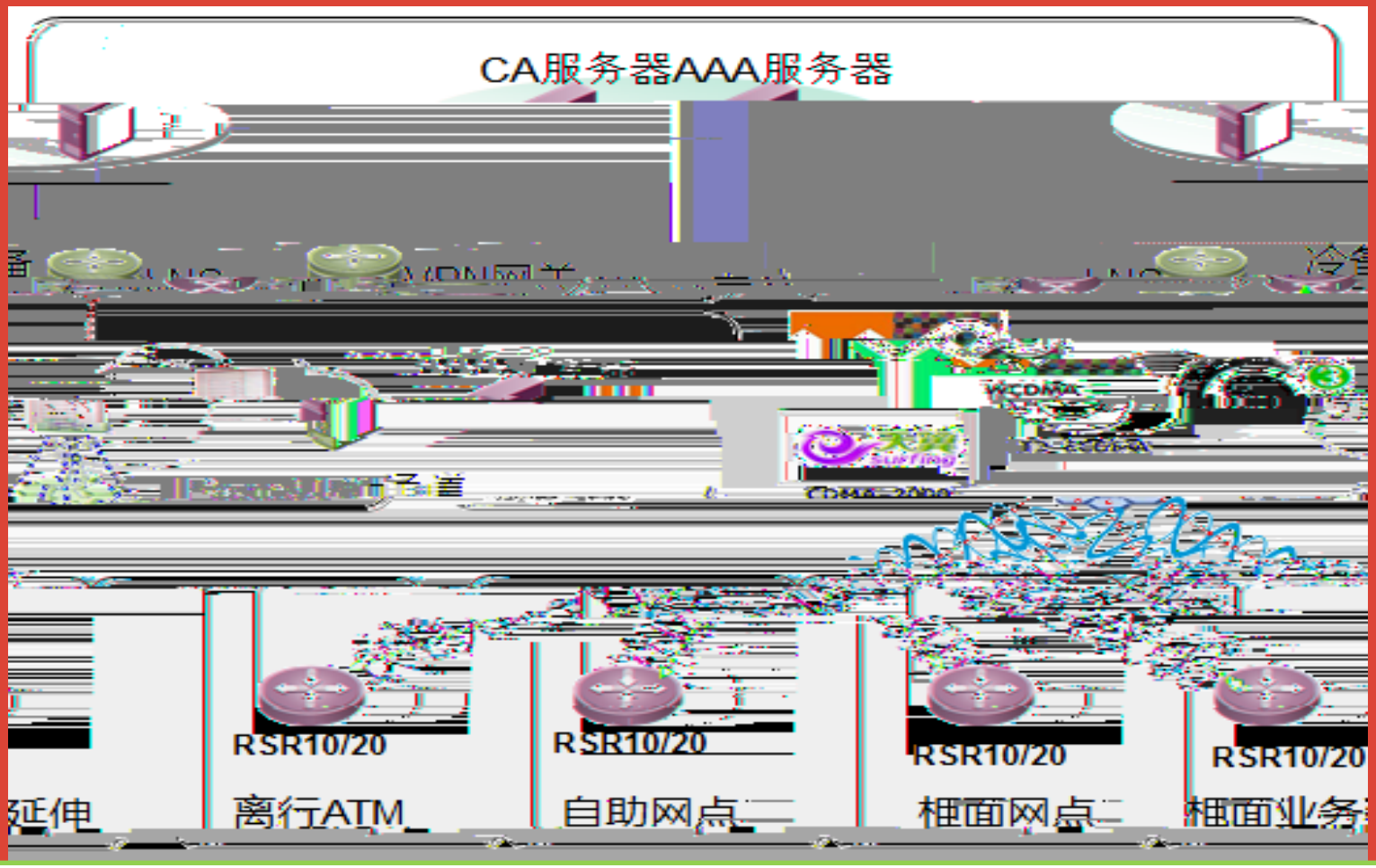
۲ ۱ OBJ 3G ۱

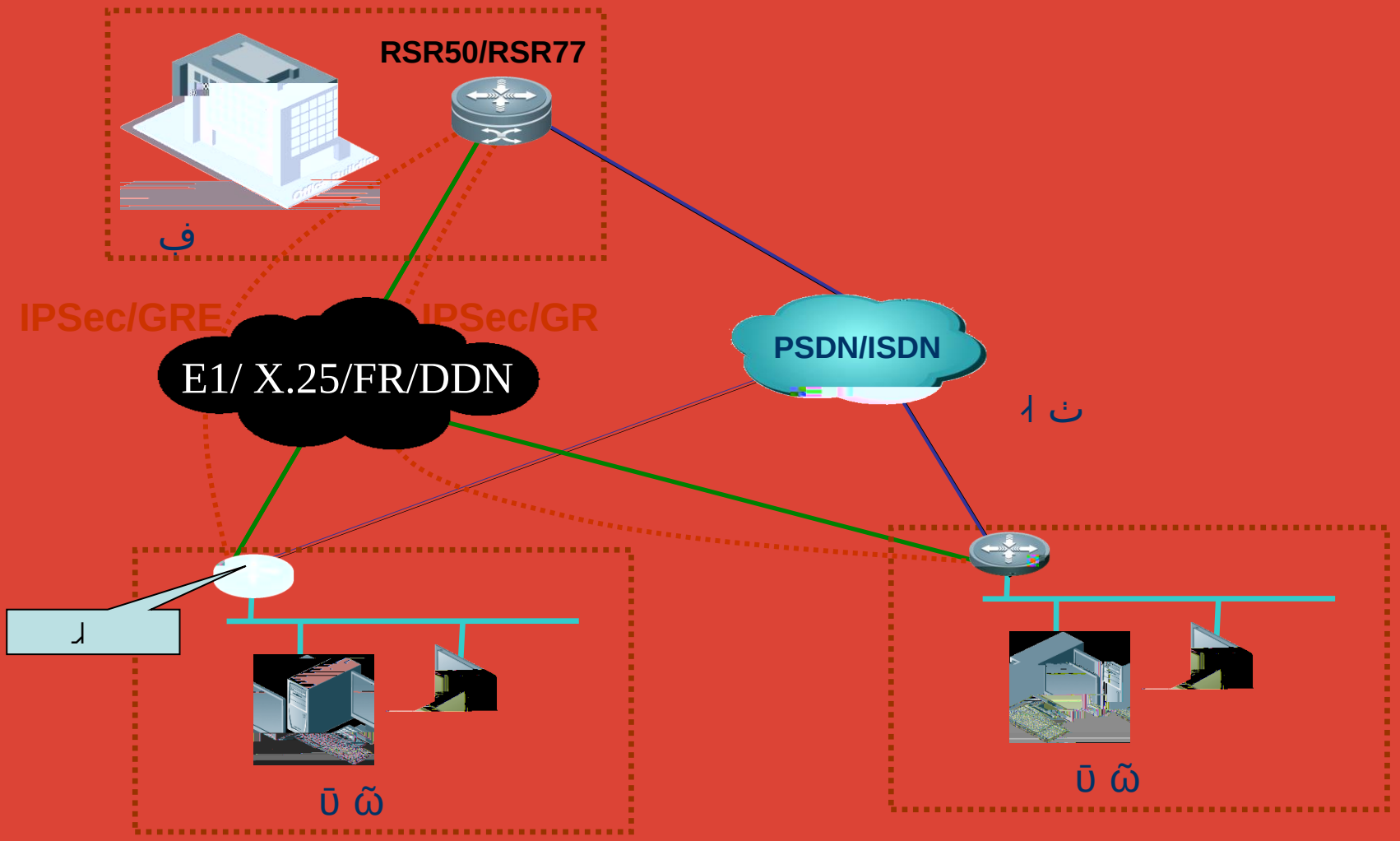



Internet
Internet




3G BFD TRACK IPSEC /RIP/OSPF

AAA SNMP


RSR50/RSR77
IPSec/GRE
IPSec/GR
E1/ X.25/FR/DDN
PSDN/ISDN

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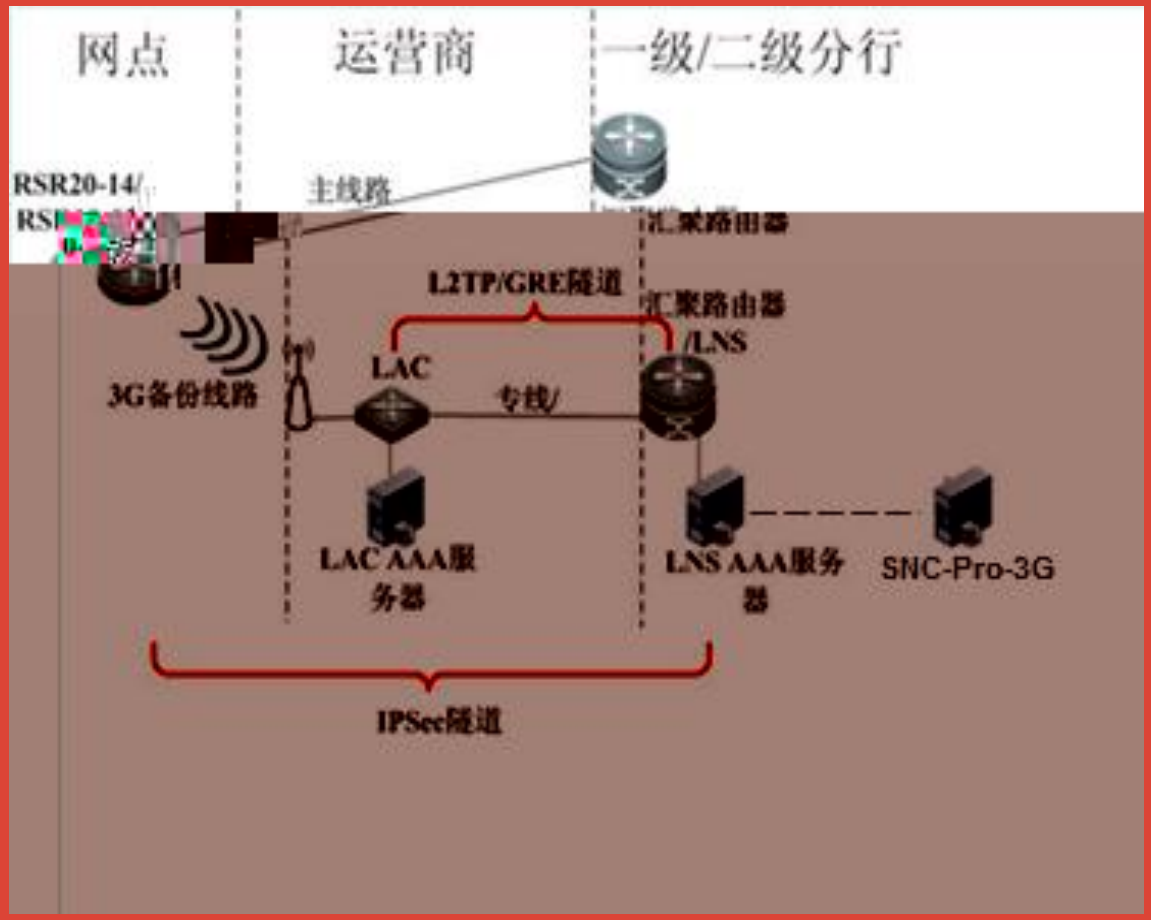
网点
运营商
一级/二级分行
RSR20-14/
主线路
L2TP/GRE隧道
汇聚路由器
/LNS
LAC
3G备份线路
专线/
LAC AAA服务器
LNS AAA服务器
SNC-Pro-3G
IPSec隧道

| | | |
|---|---|---|
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| ₩ | VLAN SVI | ă |
| 3G | 3G ﺝ ﺕ ﺎﺗ ₅ ﺕ ﺍ ﺩ 3G ₅ ﻝ ﻑ IP ﺍ LNS₅ ﺏ ﺏ ﻝ keepalive ﻟ | |
| IPSEC | ﺎﺗ أ ﺓ SM1 ﻝ \| ﺏ ﻝ DPD ﻟ | |
| ﺕ ﺍ ∩ | ﺎﺗ OSPF+ ً ﺕ ﺍ | |
| DLDP | MSTP ﺝ ﺕ ﻟ | |
| QOS | MSTP ﺍ ﺕ ﺎﺗ LLQ+CBWFQ ﻙ | |
| ﺏ ﻝ | ﻙ ﻝ ﺍ ﺕ ﻝ telnet ﺁ ﺕ IP | ă |
| | AAA/SNMP/ACL ﺵ ﺫ /ACL ﮒ ﺩ ⅜ ﻝ ﺯ | ﺭ ﺏ ﻝ |

## IPSEC

```
ip access-list extended 100                    //    ﺏ ﻟ IPSec      ﺭ      ﻟﻟ
 10 permit ip 10.0.0.0 0.0.0.255 22.144.20.0 0.0.0.255
!
crypto isakmp policy 1
 authentication pre   -share
!
crypto isakmp keepalive 10 2                   //    ﺏ ﻟ DPD   ﻟﻟ
crypto isakmp key 7 06576c507b4044 address 21.147.251.130
crypto ipsec transform   -set myset  esp -sm1   //    ﺓ SM1 ﻝ │    ﺭ
crypto map mymap 1 ipsec   -isakmp
 set peer 21.147.251.130
 set transform  -set myset
 match address 100
!
interface Async 1
 crypto map mymap                              //                  ﺓ
!
```

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## KOA

3G .doc

2.0 3G

RSR SIC-3G .doc

RSR SIC-3G V1.0.zip

RSR .doc

RSR .doc

RSR20 V1.2.doc

RSR20

RSR .doc

RSR 2.0.rar

Ruijie 锐捷网络

# 谢谢 | 创新网络价值


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〒 ╪ ث29 ฑ11 ∨ ﻉ 100036

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E-Mail: xxx@ruijie.com.cn