RG-S5750-L

RGOS 10.4(2b12)p2

V1.1

RGOS 10.4(2b12)p2

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-
-

- http://www.ruijie.com.cn/
- http://webchat.ruijie.com.cn
- http://www.ruijie.com.cn/service.aspx
- 7 × 24 4008-111-000
- http://support.ruijie.com.cn
- service@ruijie.com.cn

WEB	WEB

1)

Q , 5× 2˘4‡G!5B

Ú 4¡2˘4‡G!5B Q , 5×Ì G Y ¨ ÙÀ, ß0·8V Ö

1. G!5BCLI \ Q ,
2. ¸. G!5B1u)ÚQ ,
3. HTTP Æ u
4. G!5BLINE Q ,
5. G!5B [°2˘4‡ Q ,
6. G!5BCPUI-LOG Q ,
7. G!5B Y ,,Ì G Q ,
8. G!5B2˘4‡ „ « Q ,
9. G!5BUSB Q ,
10. G!5B2˘4‡ 4{4¨ x Q ,
11. G!5B Ú·1u)ÚQ ,
12. G!5BK…L$ Q ,
13. 8V6Ñ1u)ÚG!5B Q ,
14. A Û1u)ÚG!5B Q ,

2 Á ´ a Â w W

2.1 ´ Ð Ð a Â ü » w W

2.1.1 disable

ü(M ı ª ß¨?UL! " ' !*ü üX4{ ÿ¨A¸ ;> (M *ü Q , disable ˜

disable [privilege-level]

DA¨ â

D	£E˜
privilege-level	L$1 4{

5 ,ŒG!5B ·

Q , ı ª (M *ü ı ª

S*üÛ—

S*üA„ Q , ¢(M *ü ı ªEÔ BEî*ü ı ª ˜ V p t Þ L$1 4{ ¨ í Ú ! L$1 4{
L! " Ûh,X L$1 4{ ˜

A¨ â	**disable** Q , âM6 C‡ L$1 4{ NO ª b ' ! L$1 4{ ˜

G!5B _

ßM6,X/ _G!5BA ÛÚ ! L$1 4{L! " 1 4{ Ö
Ruijie# disable 10

+!	A¨ â
enable	¢ BEî*ü ı ªEfl 9 (M *ü ı ª ¨ Œ5ÙO) ¨P‹4{ ÿ L$ ˜

¸Ì G Q ,

Q ,	£E˜
-	-

G ˜A¨ â ·

Q , Z ˇ

(¸	A¨ â
-	-

2.1.2 enable

?UEfl 9(M *ü ı ª ¨A¸ ;> BEî*ü G!5B Q , enable ˜

A„ Q ,,XA”4 µCA¸ 5×É] <G!5B Q , 5×° ˜

DA¨ â

D	£E˜
-	-

M ØÚ[°,X [° Æ ‘ [° ,X Y ^ „7¾ Ûn ¨ Ø ü‡ü ,X PC Þ4ŒEEe ‘!'EîE
TFTP ª ŒEg A ÛX Flash ˜M ØÚ,X Y ‘ < ı Ôü ,XEg 9 ¨ ·!8 ¨ NO Ý
’; CLI Q ,,XG!5BNN c 94ŒEe M ØÚ[°,X Y ˜ ” Œ ¨ ˝ b Ôo x f ª Q , ¨ íLÔU
üM ØÚ[° NX m 9,Ì h,X h1(µC ¨ –A Q ,6Ñ07 ;> ˜

ßM6,X/ _ ;> M ØÚ[° line_rcms_script.text ¨E› Þ[°*üb ’ Ô ÝŒ9 • ÞX ¡
å **Telnet** s6Ñ¨ [° Y V ßÖ

```
configure terminal
line tty 1 16
transport input all
no exec
end
```

;> 4§ p Ö

G!5B _

```
Ruijie# execute flash:          line_rcms_script.text
executing script file line_rcms_script.text .....
executing done
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Ruijie(config)#          line vty        1 16
Ruijie(config-line)#              transport input all
Ruijie(config-line)#              no exec
Ruijie(config-line)#             end
```

Q ,	£E˜

ip telnet source-interface interface-name

0‖7	• ,,X t 2O _ ¨0 · t ¨7 1T) t ˜
encrypted-password	• , [˜

5 ,ŒG!5B ·

Q , ı ª line G!5B ı ª

S*üÛ— A„ Q ,*übG!5B ˝E°/ß'ü A' Ò‚O) line 4 CˆEfl> AxA ,X • , ˜

G!5B _ ßM6,X/ _ Ûn line ,O) • , red Ö
Ruijie(config)# line vty 0
Ruijie(config-line)# password red

,Ì G Q ,

Q ,	£E˜
login	üy • ÞG!5B,O)P‘A ª 1T) • ,P‘A ª

G ˜A¨ â ·

Q , Z ˇ

(¸	A¨ â
-	-

2.1.17 password policy

?UG!5B • ,] <1*+9 ¨A¸ ;> G!5B Q , password policy ˜A„ Q ,,X no 6 ª Ò18 • ,] <1*+9 ˜

password policy {**min-size** length | **strong** | **no-repeat-times** times | **life-cycle** days }

no password { **min-size** | **strong** | **no-repeat-times** | **life-cycle** }

DA¨ â

D	£E˜
min-size	A 5B • , ÔªKS z
length	• , ÔªKS z
strong	A 5B • , „
no-repeat-times	G!5BL$ G¡ Æ S*üŒ¥ · ı ˇG!5BE ,X • ,
times	Œ¥ · ı ˇG!5BE ,X • ,
life-cycle	G!5B • ,*ó, < ó
days	• ,*ó, < ó¨) ! Öý

5 ,ŒG!5B ·

Q , ı ª < G!5B ı ª

no username name

D	£E˜
name	*ü Æ ˜
password	*ü • , ˜
0|7	• ,,X t 2O _ ¨0 · t ¨7 1T) t ˜
encrypted-password	• , [˜
privilege-level	*ü 4¥ n L$1 4{ ˜

DA¨ â

5 ,ŒG!5B .

Q , ı ª < G!5B ı ª

A„ Q ,*üb ¿0 *ü D B g ¨ oAxA S*ü˜

S*üÛ—

a "... ª V p Ûn t 2O _ 7 ¨ íEg 9,X Ü' [KS z NO J D ˜
Eî ·NO Ûn t 2O _ 7 ˜Ø ß¨¾Ý Æ J2lC ˘4£ t
E ,X • , ° ¨ !LØU Ûn t 2O _ 7 ˜

Q , Z ˇ	(¸	A¨ â
	-	-

2.2 ´ Á ¯ x ž a Â ü » w W

2.2.1 banner login

?UG!5B,O) ÛNl µC Ą ü< G!5B ı ª ß;> Q , **banner login** ?U “#\,O) ÛNl µC,XG!5B ¨ S*ü **no banner login** Q , ˜

banner login c message c

DA¨ â	D	£E˜
	c	,O) ÛNl µC,X ÚŁh0œ ¨!£ „Eî µ K¨ Æ A ¸) K¨ Lh0œ
	message	G!5B,O) ÛNl µC Y

5 ,ÕG!5B	·
Q , ı ª	< G!5B ı ª
S*üÛ—	S*üĄ„ Q , ˆ „G!5B,O) ÛNl µC ¨ ’*ü ,O)2˘4‡ ° ¨E› o µC î> / ¸ 9 ˜ V p K 94§ 3,X ÚŁh0œ â¡’ Eg 9 +0œ ¨ íE› o +0œ Ú› 2˘4‡ ö×˜

G!5B _	ßM6,X/ _Efl> ,O) ÛNl µC,XA 5B Ö Ruijie(config) Ruijie(config)# banner login $ enter your password $

,Ì G Q ,	Q ,	£E˜
	-	-

G ˜A¨ â	·

Q , Z ˇ	(¸	A¨ â
	-	-

2.2.2 banner motd

?UG!5B!£ „Eî-„ µC Ą ü< G!5B ı ª ß;> Q , **banner motd** ?U “#\!£ „Eî-„„XG!5B µC ¨ S*ü **no banner motd** Q , ˜

banner motd c message c

DA¨ â	D	£E˜
	c	!£ „Eî-„ µC,X ÚŁh0œ ¨!£ „Eî-„ µC K¨ Æ A ¸) K¨Lh0œ

	message	G!5B,X!£ „Eî-„ µC Y
5 ,ÕG!5B	.	
Q , ı ª	< G!5B ı ª	
S*üÛ—	S*üA„ Q , ^ „G!5B!£ „Eî-„ µC ¨ '*ü ,O)2˘4‡ ° ¨E› o µC î> / ¸ 9 ˜ V p K 94§ 3,X ÚLh0œ â¡' Eg 9 +0œ ¨ íE› o +0œ Ú› 2˘4‡ ö×˜	
G!5B –	- - ßM6,X/ _Efl> !£ „Eî-„ µC,XA 5B Ö Ruijie(config)# banner motd $ hello,world $	

,Ì G Q ,	Q ,	£E˜
	-	-

month	ÜÑX +0œ></ ¨ V 3 ÜÑ¨ Mar
day	„ ó¨ ¢ 1 31
cancel	“#\Au æXG¡CK

5 ,ÕG!5B .

Q , ı ª (M *ü ı ª

S*üÛ— S*üA„ Q , ^ „ ÛnA ÛüÛn,X ° | ¨ Efl> 1u)Ú˜

G!5B _ ßM6,X/ _ Ûn 10 ÚJs „ âG¡CK2˘4‡ Ö
Ruijie# reload in 10
Router will reload in 600 seconds.

,Ì G Q ,

Q ,	£E˜
-	-

G ˜A¨ â .

(,	

2.3 ‹ ü » w W

2.3.1 show clock

?U „„ß2˘4‡ ˚K¨ ¨A¸ ;> (M *ü ı ª Q , **show clock** ˜

show clock

DA¨ â	D	£E˜
	-	-

5 ,Œ5B1 .

S*üÛ—	S*üÄ„ Q , ¨ „‚ß£ 54 Cˆ,XG!5B µC ˜
G!5B _	ßM6,X/ _ Ú„‚ß console •,XG!5B µC Ö Ruijie# show line console 0 CON Type speed Overruns * 0 CON 9600 45927 Line 0, Location: "", Type: "vt100" Length: 24 lines, Width: 79 columns Special Chars: Escape Disconnect Activation ^^x none ^M Timeouts: Idle EXEC Idle Session never never History is enabled, history size is 10. Total input: 53564 bytes Total output: 395756 bytes Data overflow: 27697 bytes stop rx interrupt: 0 times

˘ G ˜A¨ â— -

3.5 ip http secure-port

A 5Bhttps Æ u,X0ˆ • ˜ S*ü **no** Q , 6 Æ5 ,Õ0ˆ • ˜
ip http secure-port port-number
no ip http secure-port

˘ DA¨ â—

D	£E˜
port-number	A 5Bhttps ,X Æ u0ˆ • ¨ “ 8×¨ 443 ˆ1025-65535 ˜

˘5 ,Õ5B!G— T‹Ax0ˆ • ¸ 443

˘ Q , ı ª — < G!5B ı ª

˘ S*üÛ— — A„ Q ,*übA 5B https Æ u,X0ˆ • ˜

˘G!5B _ — ßM6,X/ _ Q ,A 5B https ,X Æ u0ˆ • 4443 ˜

```
5XLMLH FRQILJXUH WHUPLQDO
(QWHU FRQILJXUDWLRQ FRPPDQGV RQH SHU OLQH (QG ZLW
5XLMLH FRQILJ LS KWWS VHFXUH SRUW
```

˘,Ì G Q , —

Q ,	£E˜
enable service web-server	’ Ô2˘4‡ HTTP Æ u
show web-server status	/ web Æ u <(Õ

˘ G ˜A¨ â— -

3.6 show web-server status

/ Web Æ uG!5B µC ‘(Õ˜
show web-server status

˘ DA¨ â—

D	£E˜
-	-

˘5 ,Õ5B!G— -

˘ Q , ı ª — (M ı ª

˘ S*üÛ— — -

˘G!5B _ — ßM6,X/ _ Q , / Web Æ uG!5B µC ‘(Õ

```
5XLMLH VKRZ ZHE VHUYHU VWDWXV
KWWS VHUYHU VWDWXV HQDEOHG
KWWS VHUYHU SRUW
KWWSV VHUYHU VWDWXV HQDEOHG
KWWSV VHUYHU SRUW
KWWS V XVH PHPRU\ EORFN FUHDWH WDVN QXP
```

˘,Ì G Q , —

Q ,	£E˜
enable service web-server	’ Ô2˘4‡ HTTP Æ u
ip http port	A 5Bhttp Æ u,X0ˆ •
ip http secure-port	A 5Bhttps Æ u,X0ˆ •

ˇ G ˜A¨ â— -

4 ´ LINE w W

4.1 LINE ´ ü » w W

4.1.1 access-class

A 5B Line ßh*ü¡X ACL˜A K´ { º>< ¯˜S*ü **access-class** acl-no { **in | out** } Q ,G!5B Line ß¸XA K´ { º>< ˜ S*ü no **access-class** access-list-number {**in | out**} Q , “#\ LINE ß¸X ACL G!5B ˜

[**no**] **access-class** access-list-number {**in | out**}

aux	EY • ¨ Ø , üĈ^+ <2˘ º{ Þ
console	{ •
tty	Ø9 • ¨ Ø , üĈ^+ <2˘ º{ Þ
vty	<.4 0^4 C^ ¨EÖüb telnet/ssh E† y
First-line	?UEfl 9,Xfirst-line 4Œ ¸
Last-line	?UEfl 9,Xlast-line 4Œ ¸

5 ,Õ!5B 4ê Ë

	_ 2 ÖÚ*üX VTY E† y D,´ £ å 10 ¨ ^*ü VTY 4Œ ¸8×¨ 0—9 ˜ Ruijie(config)# line vty 10

,Ì G Q ,

Q ,	£E˜
-	-

G ˜A¨ â .

Q , Z ˇ

(¸	A¨ â
-	-

4.1.4 transport input

A 5B Line ß^ „EîA ,X Ûh #A ¨S*ü **transport input** Q ,A 5B Line ß^ „EîA ,X #A ˜S*ü **default transport input** 6 Æ LINE ß A EîA ,X #A 5 ,Õ ˜

transport input {**all | ssh | telnet | none**}

default transport input

DA¨ â

D	£E˜
all	G!5BA„Line ß¨ A Ý¸X #A EîA ˜
ssh	G!5BA„Line ß¨ ¾A SSH #A EîA ˜
telnet	G!5BA„Line ß¨ ¾A Telnet #A EîA ˜
none	G!5BA„Line ß¨ Æ A ˇ) #A EîA ˜

5 ,ÕG!5B

5 ,ÕA 5B ° ¨ VTY A Ý¸X #A EîA ˜5àJ W2O _,X TTY ,XT‹Ax NONE ¨ Æ A ˇ) #A EîA ˜ 'A 5B Z,Ì h,X #A ^ „EîA â¨ ^ „ S*ü **default transport input** Q , ÚA 5B 6 Æ T‹Ax ˜

Q , ı ª

Line G!5B ı ª

S*üÛ—

A„ Q ,G!5B Line ı ª ß A EîA ,X #A ˜ VTY üT‹Ax ß¨ A Ý#A Eî µ˜ 'G! 5B Z A EîA ,X #A â¨ ¾ÝG!5B,X #A ! ^ „ ü˝ h,X VTY ÞE† y äs ˜ S*ü **show running** Q , „„ß Line ß¸XG!5B µC ˜

A¨ â

6 ÆT‹AxG!5B S*ü**default transport input** Q , ˜ **no transport input** Q , ¨ ÚU!6 ˝ h LINE ı ª ß Ý¸XEî µ#A ˜A 5B4§ p â **transport input none** ,Ì à˜

G!5B –

A 5B ü line vty 0 4 ß¨ ¾A telnet #A ,O) Ö
Ruijie# configure terminal
Ruijie(config)# line vty 0 4
Ruijie(config-line)# transport input telnet

,Ì G Q ,

Q ,	£E˜
show running	„„ß¸X(ÕµC ˜

destination-url	,´,X [˚ URL ˜ B [˚ ÞŒ‹ ŒQ | 0 ¨E› þ ,´,X ˆ „ Œ5ÙŒ°ßX ˜

5 ,ŒG!5B .

Q , ı ª (M ı ª

S*üÛ—

S*ü copy Q , ˆ „ r) Øj , | Bü K¨,X ¸Bæ „ ‘5%4° Æ u < K¨,X [˚ ô Eg ˜

(M n [˚2˘4‡,X URL !4ÔÖ

!4Ô	A¨ â
flash:	flash , | Bü˜E› þ!4Ôü ÝA ÛÞÑ˜ „ S*ü˜ ’ URL Æ S*ü!4Ô‚X ˚ í ¨5 ,Õ></ flash ˜Eî A Û‚X | /ßcFÑ– , ü flash Þ˜
tftp:	TFTP 5%4° Æ u <
xmodem:	S*ü xmodem #A å5%4°A Û ¥ [˚
usb0:	1 Ôþ usb A Û
usb1:	1 ‘ þ usb A Û

a "... ª	A„ ¡ 0 Æ ŒÊîG!0œ.
A¨ â	"u ÝÛn URL !4Ô5 ,Õ></ ’ ! [˚2˘4‡

G!5B _

_ 1 Ö¢ tftp Æ u < ÞŒQ [˚

Ruijie# copy tftp://192.168.201.54/rgos.bin flash:/

_ 2 ÖÞô[˚ tftp Æ u <

Ruijie# copy

G!5B –

_ 1 Öü ,´) ßï ¸ test ,´) Ö
Ruijie# mkdir test

,Ì G Q ,

Q ,	£E˜
rmdir	đ‑8,´)
pwd	/ ’ ! [˚2˘4‡C^ X

G ˜A¨ â

·

Q , Z ˘	(¸	A¨ â
	.	

5.1.7 rmdir

â L8,´) ˜

rmdir directory

DA¨ â	D	£E˜
	directory	?U â L8,X,´) Æ, NO 0N,´)

5 ,ÕG!5B .

Q , ı ª (M ı ª

S*üÛ— Æ ÕŒîG!0œ ¡ 0, ?U â L8,X,´) NO 0N,´) ˜

G!5B – V p ’ !,´) ßÝÔþ tmp ,´) ¨ J ŁA„,´) "u Ý[˚ ˜
Ruijie# rmdir tmp

,Ì G Q ,	Q ,	£E˜
	mkdir	ï ¸,´)

G ˜A¨ â ?U â L8,X,´) N,!´ EB 4 bv Næ6 4 L Ó (A à!5 D(dïðEQr ÐG B6 f ÞÀ B1 Y Eg¿ R5 ê B W DE

G!5B _

_ 1 ÖM6,X/ _ / ' ! „ 0Cˆ X µC ˜
Ruijie# pwd
flash:/

,Ì G Q ,

Q ,	£E˜
cd	¨ 6 [°2˘4‡ ' !Cˆ X

G ˜A¨ â

.

Q , Z ˘

(¸	A¨ â
.	

5.2.2 show file systems

/ [°2˘4‡ µC

show file systems

DA¨ â

D	£E˜
.	

5 ,ÕG!5B

.

Q , ı ª

.

S*üÛ—

EîE / [°2˘4‡ µC,X Q , ¨ ˆ „ Z?• ' !A ÛÞ Ý ÕX [°2˘4‡ ¨ „ E› o [°2˘4‡ ÞX ˆ*üDNK¨ ˜

G!5B _

_ 1 Ö/ [°2˘4‡ µC
Ruijie#**show file systems**

,Ì G Q ,

Q ,	£E˜
.	

G ˜A¨ â

.

Q , Z ˘

(¸	A¨ â
.	

6 ´ CPU-LOG w W

6.1 Á ¯ x ž a Â ü » w W

6.1.1 cpu-log

?U „G!5B CPU ý*ü)[„ « µC?" ¥K…L$, ˆ „ S*ü **cpu-log** ˜

cpu-log log-limit low_num high_num

DA¨ â	D	£E˜
	log-limit	8×¨// ,X Q ,0œ
	low_num	CPU ý*ü)[?" ¥ "K…L$
	high_num	CPU ý*ü)[?" ¥P‹K…L$

5 ,ŒG!5B	T‹Ax ßA„P‹K…L$ 100% ¨ "K…L$ 90% ˜
Q , ı ª	< G!5B ı ª ˜
S*üÛ—	S*üA„ Q , ˆ „G!5B CPU ý*ü)[„ « µC?" ¥P‹ "K…L$ ¨CPU ý*ü)[CY ¸P‹K…L$,X ß¥EÕ„ « µC ¨ CPU ý*ü)[Õ4`P‹ b?" ¥P‹K…L$ °, ¾¥EÕÕ „ « µC * CPU ý*ü)[" b?" ¥ "K…L$ â ¥EÕ„ « µC ,Eî ' ! CPU ý*ü)[˜4£ ß! ¨A„ µC ¾ý*ü CPU ý*ü)[P‹ bP‹K…L$C ‹ " b "K…L$ ° ¥EÕ˜
G!5B –	ßM6,X/ _ Ú CPU ý*ü)[?" ¥ "K…L$G!5B 70% ¨CPU ý*ü)[?" ¥P‹K…L$G!5B 80% ˜ ruijie(config)# cpu-log log-limit 70 80 8„ CPU ý*ü)[P‹ b 80% Ú/ V ßµC Ö Oct 20 15:47:01 %SYSCHECK-5- CPU_USING_RATE: CPU utilization in one minute : 95% ¨Using most cpu's task is ktimer : 94% 8„ CPU ý*ü)[" b 70% Ú/ V ßµC Ö Oct 20 15:47:01 %SYSCHECK-5-CPU_USING_RATE: CPU utilization in one minute :68% ¨Using most cpu's task is ktimer : 60% Oct 20 15:47:01 %SYSCHECK-5-CPU_USING_RATE: The CPU using rate has down!

,Ì G Q ,	Q ,	£E˜
	-	-

G ˜A¨ â	·

Q , Z ˇ	(,	A¨ â
	-	-

24	0%	0%	0%	mstp_event
25	0%	0%	0%	GVRP_EVENT
26	0%	0%	0%	rldp_task
27	0%	2%	1%	rerp_task
28	0%	0%	0%	reup_event_handler
29	0%	0%	0%	tpp_task
30	0%	0%	0%	ip6timer
31	0%	0%	0%	rtadvd
32	0%	0%	0%	tnet6
33	2%	0%	0%	tnet
34	0%	0%	0%	Tarptime
35	0%	0%	0%	gra_arp
36	0%	0%	0%	Ttcptimer
37	8%	1%	0%	ef_res
38	0%	0%	0%	ef_rcv_msg
39	0%	0%	0%	ef_inconsistent_daemon
40	0%	0%	0%	ip6_tunnel_rcv_pkt
41	0%	0%	0%	res6t
42	0%	0%	0%	tunrt6
43	0%	0%	0%	ef6_rcv_msg
44	0%	0%	0%	ef6_inconsistent_daemon
45	0%	0%	0%	imid
46	0%	0%	0%	nsmd
47	0%	0%	0%	ripd
48	0%	0%	0%	ripngd
49	0%	0%	0%	ospfd
50	0%	0%	0%	ospf6d
51	0%	0%	0%	bgpd
52	0%	0%	0%	pimd
53	0%	0%	0%	pim6d
54	0%	0%	0%	pdmd
55	0%	0%	0%	dvmrpd
56	0%	0%	0%	vty_connect
57	0%	0%	0%	aaa_task
58	0%	0%	0%	Tlogtrap
59	0%	0%	0%	dhcp6c
60	0%	0%	0%	sntp_recv_task
61	0%	0%	0%	ntp_task
62	0%	0%	0%	sla_deamon
63	0%	3%	1%	track_daemon
64	0%	0%	0%	pbr_guard
65	0%	0%	0%	vrrpd
66	0%	0%	0%	psnpd
67	0%	0%	0%	igsnpd
68	0%	0%	0%	coa_recv
69	0%	0%	0%	co_oper
70	0%	0%	0%	co_mac
71	0%	0%	0%	radius_task
72	0%	0%	0%	tac+_acct_task
73	0%	0%	0%	tac+_task
74	0%	0%	0%	dhcpd_task
75	0%	0%	0%	dhcps_task

8.1.6 logging facility

?UA 5B „ « µC,XA Û ¨A¸ ü< G!5B ı ª ß;> A„ Q , ˜A„ Q ,,X no 6 ª ¨ 6 ÆA Û T‹Ax (23) ˜

logging facility facility-type

no logging facility

DA¨ â	D	£E˜
	facility-type	Syslog A Û ¨ K ',XA 5B A¸ 5×S*üÛ+ ˜

5 ,Œ!5B Local7(23)

Q , ı ª < G!5B ı ª

ß> < ˜> < 2 ¯ Syslog ˆ6Ñ¸XA Û Ö

S*üÛ—

Numerical Code	Facility
0	kernel messages
1	user-level messages
2	mail system
3	system daemons
4	security/authorization messages
5	messages generated internally by syslogd
6	line printer subsystem
7	network news subsystem
8	UUCP subsystem
9	clock daemon
10	security/authorization messages
11	FTP daemon
12	NTP subsystem
13	log audit
14	log alert
15	clock daemon
16	local use 0 (local0)
17	local use 1 (local1)
18	local use 2 (local2)
19	local use 3 (local3)
20	local use 4 (local4)
21	local use 5 (local5)

22	local use 6 (local6)
23	local use 7 (local7)

T‹AxA Û (local7) 23 ˜

G!5B _

ßM6,XA 5B Syslog A Û kernel Ö
Ruijie(config)# logging facility kern

,Ì G Q ,

Q ,	£E˜
logging console	A 5B A ü{ ˜ Þ / ,X „ « µC 4{ ÿ

G ˜A¨ â

·

Q , Z ˘

(¸	A¨ â
-	-

8.1.7 logging file flash

?U Ú„ « µC – , ü=) FLASH ¨A¸ ü< G!5B ı ª ß;> A„ Q , ˜ “#\ ü=) FLASH A) „ « µC ¨ S*üA„ Q ,,X no 6 ª ˜

logging file flash:filename [max-file-size] [level]

no logging file

DA¨ â

D	£E˜
Filename	„ « [° Æ ˜ Æ œ [°2O _ ¨ ¸ n txt 2O _ ˜
max-file-size	„ « [°,X Õß ˜ ¢ 128K 6M bytes ¨5 ,Õß ª 128K ˜
level	A > A) „ « [° ,X „ « µC4{ ÿ˜ ^ „ S*ü4{ ÿÆ/˜ ¨ 3 ^ „„¨ y S*üD + ˜5 ,Õm =) FLASH ,X „ «4{ ÿ 6 ˜G b „ « µC,X4{ ÿ¨A¸ 5»>< 1 ˜

5 ,Õ G!5B

Æ6ÑÚ„ « µCA) =) FLASH ˜

Q , ı ª

< G!5B ı ª

S*üÛ—

V p"u Ý Syslog Server ¨ Œ5Ù¸ b Øƒ] <5»<% Æ àï ü5%4° ðEg „ « µC ¨ ^ „EÝ ‰ Ú„ « µC,¨ y – , ü=) FLASH ˜
„ « [° â4Ô ¸ n

Q ¸ õ ã	y ·G!5B õ ã
S*ü Û Ð	´(Š Õ7¾ | G!5B Û 'A' Û RA ÄCÃ+ @ Å y [Ê È Ã ¹ S*ü RA y [,X ! 4Ô µ C7¾ |*ó ä EUI-64 ã,X y · Ä V p ,X RA y [ÿ Ý J WG!5B ,X Û « ÈFw A¹ y · ÚEîE› DHCPv6 9‹ ªE- o J WG!5B Ä J WG!5B Eî Û DNS á u <,X IPv6 Ã NTP á u <,X IPv6 1 Ä S*ü **no ipv6 address autoconfig** Q ¸ ôL8 y · Þ,X IPv6 Ä

[redacted]oconfig default
[redacted] autoconfig

	Q ¸	
[redacted]	**ipv6 address** ipv6-prefix/prefix-length [**eui-64**]	¹G!5B y · IPv6

,Ì G Q ¸

Q ¸	£EÄ
show ipv6 interface	¹,ß y ·,X,Ì G µ C

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

3.1.5 ipv6 general-prefix

G!5BIPv6 Eî*ü !4Ô È ü < G!5B õ ã ß S*ü **ipv6 general-prefix** Q ¸ ÄA¹ Q ¸AÁ"© ã V ß Ö

ipv6 general-prefix prefix-name ipv6-prefix/prefix-length

no ipv6 general-prefix prefix-name ipv6-prefix/prefix-length

– DAÈ â

– D	£EÄ
prefix-name	Eî*ü !4Ô,X á + Ä
ipv6-prefix	Eî*ü !4Ô,X5%4° !4Ô ÄE- þ ,X></ "©?UFI ~ RFC4291 £EÄ,X f Ë></ "© Ä
prefix-length	Eî*ü !4Ô,XKS z Ä

5 ,ÕG!5B ´

Q ¸ õ ã < G!5B õ ã

S*ü Û Ð

S*üEî*ü !4Ô Ã ¹ • “5%4°4ê Ë Ä ´ Eî*ü !4Ô n Î Ô þ !4Ô È \ î ÈKS,X(M n !4Ô Ã ¹ é*ü W Ä 'Eî*ü !4Ô ¬ ê Ê ÈE- o é*üEî*ü !4Ô,X(M n !4Ô îC³- ¬ ê Ä5%4°4ê Ë ¬ ê Ê È ¾?U Â Ô ßEî*ü !4Ô G Ã Ä

Ô þEî*ü !4Ô Ã ¹ Ù ÿ î þ !4Ô Ä

E- o ÈKS,X(M n !4ÔEî *ü ü y ·,X IPv6 G!5B Þ Ä

G!5B _

	show ipv6 general-prefix	¹,ßEî*ü !4Ô

G ÄAÈ â -

Q ¸ Z Æ

(Ë	AÈ â
RGOS10.4 (	A¹ Q ¸ ¢ RGOS10.4 (Ô Ÿ Õ Ä

3.1.6 ipv6 hop-limit

ü < G!5B õ ã ß S*üA¹ Q ¸G!5B ¥EÕ) • y [,X5 ,ÕCÇ D Ä

ipv6 hop-limit value

no ipv6 hop-limit

– DAÈ â

– D	£EÄ
-	-

5 ,ÕG!5B T¬Ax 64 Ä

Q ¸ õ ã < G!5B õ ã

S*ü Û Ð A¹ Q ¸ ¾ Í) • y [*ó È Í î • y [´ Ä

G!5B _ Ruijie(config)# ipv6 hop-limit 100

¸Ì G Q ¸

Q ¸	£EÄ
-	-

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

3.1.7 ipv6 nd dad attempts

S*üA¹ Q ¸A'5B ü y · Þ IPV6 ;> †0U "# Ê?UE²4Á ¥EÕ,XF• AË" (NS) y [,X D G£ Ä S*üA¹ Q ¸,X no 6 ã Ú 6 á5 ,Õ Ä

ipv6 nd dad attempts value

no ipv6 nd dad attempts

– DAÈ â	– D	£EÄ
	vf	F• AË" (NS) y [,X DG£ Ä'A'5B,X 0 Ê></ L !6 A¹ y · Þ,X Ipv6 | †0U "# Ä8× È: 0-600 Ä

5 ,ÕG!5B	1

Q ¸ õ ã	y ·G!5B õ ã

S*ü Û Ð	' ü y · ÞG!5B Ô þ „,X IPV6 Ê ÈüA¹ ,ó!7C 4-E- þ y · !?U W | † 0U "# È!8 ÊA¹ Ø b"t ɔᵐИ A©P),X(Š Õ Ä †0UE›/ß ;> ` Z È V p"u Ý " # †0U ÈFw A¹ Ã ¹>•!7.B S*ü È V p "# †0U Z È J èA¹ S*ü,X y · ÛAš0ú S*ü EUI-64 ,X ÛAš0ú ÈFw >< â üA¹JÒCÃ Þ , üJÒCÃ Î)„G¡ á ÈFw !8 Ê2Ï4³ î7¾ | GKÁA¹ y · (GL !6 üA¹ y · ÞE¯> IPV6 ,X,Ì G ¡ 0) È!8 Ê ™NO ¹ • Â JG!5B „,X È JEîE› a õ down/u y ·G¡ „ | †0U "# Ä Ï) ™ ‰ ß ' Ô þ y · ¢ down (Š Õ ¬ u (Š Õ ÊFÑ î A¹ y · Þ,X G¡ „ | †0U "# Ä

G!5B –	Ruijie(conifgf)# interface vlan 1 Ruijie(conifg-if)# ipv6 nd dad attempts 3

,Ì G Q ¸	Q ¸	£EÄ
	show ipv6 inte ÿ¤γʿƟ	¹,ß y ·,X µ C Ä

G ÄAÈ â	´

Q ¸ Z Æ	(Ë	AÈ â
	-	-

3.1.8 ipv6 nd manage l'γAɔɪ̈ɤÿ̈ɜ pµÝM

S*üA¹ Q ¸A'5BCÃ+ < @ y [,X" **manage address configu ÿᵐɬ̈ɤÛɔɪ«** ! È S*üA¹ Q ¸,X no 6 ã Ú#ÙL8A¹ Û « ! Ä

ipv6 nd manage l'γAɔɪ̈ɤÿ̈flag

no ipv6 manage l'γAɔɪ̈ɤÿ̈flag

– DAÈ â	– D	£EÄ
	-	-

5 ,ÕG!5B	üCÃ+ < @ y [A¹ Û « !"u Ý>•A'5B Ä

Q ¸ õ ã	y ·G!5B õ ã Ä
S*ü Û Ð	A¹ Û « !,XA'5B ‡ n Z A¹CÃ+ < @ ,X ú?U S*ü <(Š Õ7¾ |G!5B 99‹ ª Ä V p Û « !A'5B Z È Ú S*ü <(Š Õ7¾ |G!5B 99‹ k È ú í á S*ü Ä
G!5B _	Ruijie(config)# int vlan 1 Ruijie(config)# ipv6 nd managed-config-flag

,Ì G Q ¸

Q ¸	£EÄ
show ipv6 interface	¹,ß y · G b ra-info ,X µ C Ä
ipv6 nd other-config-flag	A'5B <(Š Õ7¾ |G!5B9‹ ªL8 ê,X µ C,X Û « ! Ä

G ÄAÈ â	´

Q ¸ Z Æ

(Ë	AÈ â
-	-

3.1.9 ipv6 nd ns-interval

S*üA¹ Q ¸A'5B y · ÞF• AË" (NS) ,XG¡ ôKÈLh È S*üA¹ Q ¸,X no 6 ã Ú 6 á5 ,Õ Ä

ipv6 nd ns-interval milliseconds

no ipv6 nd ns-interval

– DAÈ â

– D	£EÄ
milliseconds	F• AË" ,XG¡ ôKÈLh È ¹!¿/¦) ! È ,X8× È Ö 1000-4294967295

5 ,ÕG!5B	üCÃ+ < @ y [(RA) 5 ,Õ 0(></ þ Û n) È A' Û7¾ Å üF• ¥)„> F• AË " S*ü,XG¡ ôKÈLh 1000ms(1 /¦) Ä
Q ¸ õ ã	y ·G!5B õ ã
S*ü Û Ð	G!5B,X Ú üCÃ+ < @ y [(RA) >• ¥ × Î • È à ÊA¹ 3>•A' Û7¾D• S*ü Ä ÎA, á ?U ÚA¹ A'5B k þ ã Ä
G!5B _	Ruijie(conifg-if)# ipv6 nd ns-interval 2000

,Ì G Q ¸

Q ¸	£EÄ

	show ipv6 interface	¹,ß y ·,X µ C

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

3.1.10 ipv6 nd prefix

A¹ Q ¸*ü 9G!5BCÃ+ < @ y [(RA) Ù ÿ,X !4Ô È S*üA¹ Q ¸,X no 6 ã Ú ôL8 G!5B ,X !4Ô ê5Ù 6 á !4ÔG!5B – D,X5 ,Õ Ä

ipv6 nd prefix ipv6-prefix/prefix-length | **default** [[valid-lifetime preferred-lifetime] | [**at** valid-date preferred-date] | **infinite** | **no-advertise**]] [**off-link**] [**no-autoconfig**]

no ipv6 nd prefix ipv6-prefix/prefix-length | **default** { [**off-link**] [**no-autoconfig**] | [**no-advertise**] }

– D	£EÄ
ipv6-prefix	IPV6 ,X5%4° Ë È™NOFI RFC4291 ,X ></ 6 ã Ä
prefix-length	IPV6 !4Ô,XKS z È"¼ ã !M6 ™NO t Þ'/' Ä
valid-lifetime]] Â C	M6 ™!PÕ ûÞ û à 0 Ù

5 ,ÕG!5B 200 /¦ È rL ¥EÕ y [,XKÈLh ü 200 /¦ Þ ß#B | 20 Á Ä

Q ¸ õ ã y ·G!5B õ ã Ä

S*ü Û Ð V pA¹A' Û '5 ,ÕCÃ+ A' Û Ê ÈFw A'5B,XKÈLh á6Ñ ó û bCÃ+ <*ó , ó,X ÊKÈ Ä º ê È ZL !6JÒCÃ Þ,X J WA' Û à Ê ¥EÕCÃ+ < @ y [5à 4*ü5%4° ú ' È ¹ rL ¥EÕ y [,XKÈLh Ú üA¹ Þ#B |,R Ú ` Ä

V p Û n GK + **min-max** ÈFw rL ¥EÕ y [,XKÈLh Ú ü Ô ã ` Ô û KÈLc EÝ ½ Ô þ Ä

G!5B _

```
Ruijie(config)#          interface vlan          1
Ruijie(config-if)#           ipv6 nd ra-interval          110
Ruijie(config-if)#           ipv6 nd ra-interval min-max          110 120
```

,Ì G Q ¸

Q ¸	£EÄ
show ipv6 interface	¹,ß y · G b ra-info ,X µ C Ä
ipv6 nd ra-lifetime	A'5BA' Û,X*ó , ó Ä
ipv6 nd ra-hoplimit	A'5BCÃ+ < @ y [,XCÇ D +!‰,X Ä
ipv6 nd ra-mtu	A'5BCÃ+ < @ y [,X MTU +!‰,X Ä

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

Q ¸ õ ã	y ·G!5B õ ã Ä
S*ü Û Đ	*ü 9A'5B ¥EÕ,XCÃ+ < @ ,XCÇ D +!‰,X Ä
G!5B –	Ruijie(config)# interface vlan 1 Ruijie(config-if)# ipv6 nd ra-hoplimit 110

,Ì G Q ¸

Q ¸	£EÄ
show ipv6 interface	¹,ß y · G b ra-info ,X µ C Ä
ipv6 nd ra-lifetime	A'5BA' Û,X*ó , ó Ä
ipv6 nd ra-interval	A'5BCÃ+ < @ y [,X ¥EÕKÈLh Ä
ipv6 nd ra-mtu	A'5BCÃ+ < @ y [,X MTU +!‰,X Ä

G ÄAÈ â	´

Q ¸ Z Æ

(Ë	AÈ â
-	-

3.1.14 ipv6 nd ra-mtu

S*üA¹ Q ¸A'5B y · Þ ¥EÕ,XCÃ+ < @ (RA) y [,X MTU +!‰,X ÈS*üA¹ Q ¸,X no 6 ã Ú 6 á5 ,Õ Ä

ipv6 nd ra-mtu value

no ipv6 nd ra-mtu

– DAÈ â

– D	£EÄ
value	CÃ+ < @ (RA) y [,X MTU +!‰,X Ä

5 ,ÕG!5B	5%4° y ·,X IPv6 MTU Ä
Q ¸ õ ã	y ·G!5B õ ã Ä
S*ü Û Đ	V p Û n 0 ÈCÃ+ < @ á î ú MTU EÝNM Ä
G!5B –	Ruijie(config)# interface vlan 1 Ruijie(config -if)# ipv6 nd ra-mtu 1400

,Ì G Q ¸	Q ¸	£EÄ
	show ipv6 interface	¹,ß y · G b **ra-info** ,X µ C Ä
	ipv6 nd ra-lifetime	A'5BA' Û,X*ó , ó Ä
	ipv6 nd ra-interval	A'5BCÃ+ < @ y [,X ¥EÕKÈLh Ä
	ipv6 nd ra-hoplimit	A'5BCÃ+ < @ y [,XCÇ D +!‰,X Ä

G ÄAÈ â	´

Q ¸ Z Æ	(Ë	AÈ â
	-	-

3.1.15 ipv6 nd reachable-time

S*üA¹ Q ¸A'5B y · ÞEîE› NDP | Õ : ,XF• ü ÃE' û "# â ÈA¹F• >•Ax Ã E',X Õ4Á ÊKÈ È S*üA¹ Q ¸,X no 6 ã Ú 6 á5 ,Õ Ä

ipv6 nd reachable-time milliseconds

no ipv6 nd reachable-time

– DAÈ â	– D	£EÄ
	milliseconds	F• >•Ax Ã E',X ÊKÈ È ¹!¿/¦) ! È8× È Ö 0-3600000

5 ,ÕG!5B	üCÃ+ < @ y [(RA) 5 ,Õ 0(></ þ Û n) È A' Û7¾ Å üF• ¥)„> F• >• Ax Ã E',X Õ4Á ÊKÈ 30000ms(30 /¦)

Q ¸ õ ã	y ·G!5B õ ã

S*ü Û Ð	A' ÛEîE›A¹G!5B,X ÊKÈ 9 "# á Ã*ü,XF• È A'5B,X ÊKÈC^-Á ã G- Ã ¹ È ¿,X "# F• È Ú#>C È î,X5%4° ú ' Ã#\5ëA' Û È î,XC $d Ä ´!8 á ÎA, ÚA¹ ÊKÈ G!5B,XE› ã Ä G!5B,X Ú üCÃ+ < @ y [(RA) >• ¥ × Î • È à ÊA¹ 3>•A' Û7¾D• S*ü Ä V pA' 5B,X 0 ></ A' Û þ Û nA¹ ÊKÈ È G S*ü5 ,Õ Ä

G!5B _	Ruijie(conifg-if)# ipv6 nd reachable-time 1000000

,Ì G Q ¸	Q ¸	£EÄ
	show ipv6 interface	¹,ß y ·,X µ C

G!5B

ipv6-address	F• ,X IPV6 È ™NOFI ~ RFC4291 n ,X ></ 6 ã Ä
interface-id	Û nA¹F• ü,X5%4° y Ä Ù À Routed Port,L3 AP · ` SVI y · Å Ä
hardware-address	!ç ØÐÈ ™ÁÄ

P0 ü,X

– DAÈ â	– D	£EÄ
	-	-

5 ,ÕG!5B	¥EÕF• AË" Ê È ¹JÒCÃ 0 $d Ä
Q ¸ õ ã	< G!5B õ ã Ä
S*ü Û Đ	+9
G!5B _	Ruijie(config)# no ipv6 ns-linklocal-src

	G!5B _	Ruijie(config)#	ipv6 route	2001::/64 vlan 1 2005	::1

3.2 ‹ ü » w W

3.2.1 clear ipv6 neighbors

#ÙL8 | Õ : 4 ,XF• Ä

clrear ipv6 neighbors

– DAÈ â	– D	£EÄ
	-	-

5 ,ÕG!5B	(M õ ã
Q ¸ õ ã	EîE›A¹ Q ¸ Ã ¹#ÙL8 ÝEîE›F• ¥)„	Õ : 4 ,XF• È"¼ ãM- ÕG!5B,X á î>•#ÙL8 Ä
S*ü Û Ð	´
G!5B _	Ruijie# clear ipv6 neighbors

,Ì G Q ¸	Q ¸	£EÄ
	ipv6 neighbor	G!5B>< ÕF•
	show ipv6 neighbors	/ F• ><,X Y •

G ÄAÈ â	´

Q ¸ Z Æ	(Ë	AÈ â
	-	-

3.2.2 show ipv6 general-prefix

/ Eî*ü !4Ô ,X !4Ô µ C È S*ü **show ipv6 general-prefix** Q ¸ ÄA¹ Q ¸AÁ"© ã V ß Ö

show ipv6 general-prefix

– DAÈ â	– D	£EÄ
	-	-

5 ,ÕG!5B	´
Q ¸ õ ã	(M õ ã

S*ü Û Ð	S*ü **show ipv6 general-prefix** Q ¸ ¹,ßEî*ü !4Ô,X µ C Ä ¹G!5B,XEî*ü !4Ô È â DHCPv6 v 0Ã : 4 Eî*ü !4Ô ÈFÑ î / Î 9 Ä
G!5B _	/ Eî*ü !4Ô µ C È _ $ V ß Ö Ruijie# show ipv6 general-prefix There is 1 general prefix. IPv6 general prefix my-prefix, acquired via Manual configuration 2001:1111:2222::/48 2001:1111:3333::/48

,Ì G Q ¸

Q ¸	£EÄ
ipv6 general-prefix	G!5BEî*ü !4Ô

G ÄAÈ â	-

Q ¸ Z Æ

(Ë	AÈ â
RGOS10.4 (	A¹ Q ¸ ¢ RGOS10.4 (Ô Ÿ Õ Ä

3.2.3 show ipv6 interface

/ IPV6 y ·,X µ C Ä

show ipv6 interface [interface-id] [**ra-info**]

– DAÈ â

– D	£EÄ
interface-id	y · Ä Ù À ¹ þ5% y · Ãaggregateport y · ÃSVI y · Å
ra-info	¹,ßA¹ y · Þ G b ¥EÕ,X RA y [,X – D µ C Ä

5 ,ÕG!5B	´
Q ¸ õ ã	(M õ ã
S*ü Û Ð	EîE›A¹ Q ¸ Ã ¹ ¹,ß IPV6 y · Þ,X G!5B Ã ND G!5B ¹ ž,Ì G,X4³Au µ C Ä
G!5B _	Ruijie# show ipv6 interface vlan 1 Interface vlan 1 is Up, ifindex: 2001 address(es): Mac Address: 00:00:00:00:00:01 INET6: fe80::200:ff:fe00:1 , subnet is fe80::/64

INET6: 2001::1 , subnet is 2001::/64 [TENTATIVE]

ND router advertisements are sent every 200 seconds<240--160>

Flags: !M!O, Adv MTU: 1500

ND advertised reachable time is 0 milliseconds

ND advertised retransmit time is 0 milliseconds

ND advertised CurHopLimit is 64

Prefixes: (total: 1)

fec0:1:1:1::/64(Def,Auto,vltime:2592000,pltime:604800,flags:LA)

G b**ra-info** ,X Ø þ +!‰ ÿ

pltime	></ A¹ !4Ô,XOjEÝ Ý ÊKÈ (/¦) Ä
L | !L	L Û «></ A¹ !4Ô,X on-link !5B Þ Ä !L ã ñ â ÞM6,Ì ¡ Ä
A | !A	A Û «></ A¹ !4Ô,X auto-config !5B Þ , !A ã ñ â ÞM6,Ì ¡ Ä

,Ì G Q ¸

Q ¸	£EÄ
-	-

G ÄAÈ â

IPv6 Address Linklayer Addr Interface

2001::1 00d0.f800.0001 vlan 1

State: Reach/H Age: - asked: 0

fe80::200:ff:fe00:1 00d0.f800.0001 vlan 1

State: Reach/H Age: - asked: 0

+!‰	AÈ â
IPv6 Address	F• ,X IPV6
Linklayer Addr	JÒCÃ G Mac È V pE¬ þ k í / incomplete
Interface	A¹F• ü,X y ·
State	F• ,X(Š Õ Ö state/H(R) STATE ,X V ß Ö INCMP(Incomplete)—A¹F• ,X ?· d!7 üE¯ > ÈF• AË" (NS) y [Æ4£ ¥EÕ E¬"u Ý F• ,X h1(y [(NA) Ä REACH(Reachable) —></ ¢A' Û F• E²Eî ,X È üA¹(Š Õ åF• ¥EÕ y [Ê áLÔ?UNq ê,X | 0 ÄSTALE — ></ F• >•Ax Ã E',X ÊKÈ Æ4£ ó È Ø üA¹(Š Õ ÊA' Û áLÔ?UNq ê,X | 0,È Ý y [¥EÕ A¹F• Þ È!8 Ê G Ú | NUD (Neighbor Unreachability Detection) Ä DELAY—></ Ý y [å Ø b STALE (Š Õ,XF• ¥EÕ È!8 Ê(Š Õ+ STALE E@ 6 DELAY (Š Õ È ü DELAY_FIRST_PROBE_TIME seconds(5 /¦) Y V p"u Ý F• ÃE' û,XEî-¹ µ C ÈFw (Š Õ Ú + DELAY E@ 6 PROBE È à Ê åA¹F• ¥EÕF• AË" y [(NS) È!7 ã | NUD Ä PROBE—></ NUD Æ4£ | È'# F• ,X ÃE' û È !£Lh RetransTimer milliseconds åF• ¥EÕF• AË" (NS) y [,È ZF• ,X h1(ê5Ù ¥EÕ,X F• AË" y [DG£ ÆE' ÞL$ MAX_UNICAST_SOLICIT(3 þ) ?—></ þ-¹(Š Õ /R—></ Ax F• Ô þA' Û /H—></ Ax F• Ô þ

Asked

></ ü?· dF• ,XJÒCÃ Ê Æ4£ åF• ¥EÕ,X F• AË"

5 ,ÕG!5B	´
Q ¸ õ ã	(M õ ã
S*ü Û Đ	EîE›A¹ Q ¸ Ã ¹ ¹,ßCÃ+ ><,X µ C Ä

Ruijie# show ipv6 route

G!5B _

4 ´ DHCP Server & Client w W

4.1 DHCP ´ ü » w W

4.1.1 bootfile

?U n DHCP v 0Ã5 ,Õ | ô £ [Ê á È*ü DHCP "4G!5B Q ¸ **bootfile** ÄA¹ Q ¸,X **no** 6 ã Ã ¹ ª#\ n Ä

bootfile file-name

no bootfile

Q ¸ Z Æ	(Ë	AÈ â
	-	-

4.1.3 client-name

?U n DHCP v 0Ã,X á + È*ü DHCP "4G!5B Q ¸ **client-name** ÄA¹ Q ¸,X no 6 ã ôL8 DHCP v 0Ã,X á + Ä

client-name client-name

no client-name

– DAÈ â	– D	£EÄ
	client-name	n DHCP v 0Ã,X á + ÄÃ ¹*ü Ï) Û š,X ASCII +0úLš Ä á + á h Ù À â4Ô ³ á È!¨ V n river DHCP v 0Ã á + È á6Ñ n river.i-net.com.cn Ä

5 ,ÕG!5B	5 ,Õ"u Ý n v 0Ã á + Ä

Q ¸ õ ã	DHCP "4G!5B õ ã Ä

S*ü Û Ð	¾ Ý üE¯> DHCP ¹4¥ n n Ê È ! Ã ¹ ý*üA¹ Q ¸ n DHCP v 0Ã,X á + ÄA¹ á + á hA¹ Ù À â4Ô ³ á Ä

G!5B _	¹ ßG!5B _ $ È n Z Ô þ +0ú river 0 v 0Ã,X á + Ä client-name river

,Ì G Q ¸	Q ¸	£EÄ
	host	n IP `5%4° }-Õ Ä*ü bG!5B DHCP ¹4¥ n Ä
	ip dhcp pool	n DHCP "4 á + È JE¯ 9 DHCP "4G!5B õ ã Ä

G ÄAÈ â	´

Q ¸ Z Æ	(Ë	AÈ â
	-	-

4.1.4 default-router

?U n DHCP v 0Ã,X5 ,Õ5% G È*ü DHCP "4G!5B Q ¸ **default-router** ÄA¹ Q ¸,X **no** 6 ã Ã ¹ ôL85 ,Õ5% G,X n Ä

default-router ip-address [ip-address2…ip-address8]

no default-router

– DAÈ â

– D	£EÄ
ip-address	n A' Û,X IP Ä?U" 7Ç åG!5B Ô þ Ä
ip-address2…ip-address8	Ä ÃEÝ Å Ô î Ã ¹G!5B 8 þ5% G Ä

5 ,ÕG!5B 5 ,Õ"u Ý n 5 ,Õ5% G Ä

Q ¸ õ ã DHCP "4G!5B õ ã Ä

S*ü Û Ð Ô8 ™ ‰ ß ÈDHCP v 0ÃLÔ?U ¢ DHCP á u <9‹ k5 ,Õ5% G µ C Ä DHCP á u <7Ç å LÔ?U v 0Ã Û n Ô þ5% G IP ÈA¹ ™NO â ÚG!4- v ,X ü à Ô þ5%!‰ Ä

G!5B – ¹ ßG!5B _ $ È n Z 192.168.12.1 0 5 ,Õ5% G Ä
default-router 192.168.12.1

,Ì G Q ¸

Q ¸	£EÄ
ip dhcp pool	n DHCP "4 á + È JE¯ 9 DHCP "4G!5B õ ã Ä

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

4.1.5 dns-server

?U n DHCP v 0Ã,X DNS á u < È*ü DHCP "4G!5B Q ¸ **dns-server** ÄA¹ Q ¸,X **no** 6 ã Ã ¹ ôL8 DNS á u <,X n Ä

dns-server { ip-address [ip-address2…ip-address8] | **use-dhcp-client** interface-type interface-number }

no dns-server

– DAÈ â

– D	£EÄ
ip-address	n DNS á u <,X IP Ä?U" 7Ç åG!5B Ô þ Ä
ip-address2…ip-address8	Ä ÃEÝ Å Ô î Ã ¹G!5B 8 þ DNS á u < Ä
use-dhcp-client interface-type interface-number	*üEîE› RGOS EC Ê,XDHCP v 0Ã : ,X DNS á u < È 0 DHCP v 0Ã,X DNS á u < Ä

5 ,ÕG!5B 5 ,Õ"u Ý n DNS á u < Ä

Q ¸ õ ã DHCP "4G!5B õ ã Ä

S*ü Û Ð n î þ DNS á u < Ê È m ü !M6,X ì P¬ È DHCP v 0Ã ¾ Ý â f ü ! ,X DNS á u <EîA*ƒ* Bù È ! îEÝ ½ ß Ô þ DNS á u < Ä
RGOS EC Ê à Ê 3 . DHCP v 0Ã Ê È Ã ¹ ÚEîE› v 0Ã9‹ k,X DNS á u < µ C È ô EÕ4-DHCP v 0Ã Ä

G!5B _ ¹ ßG!5B _ $ È DHCP v 0Ã Û n Z DNS á u < 192.168.12.3 Ä
dns-server 192.168.12.3

Q ¸	£EÄ
domain-name	n DHCP v 0Ã,X â4Ô ³ á Ä
ip address dF ‘ **I** Ŏ **R ώ**	
ip dF "4 á ¢€ JE¯ 9**m**Ñ ‘	**DHCP**

DHCP "4G!5B õ à @

G`BœD •¾ ´

Q`BK€• ì`

	AÈ â
-	-

5 ` 5**B** Í , **T** Õ **r** " u**T** Ý

	á Ã ¹ Z Ä
G!5B _	¹ ßG!5B _ $ È4- DHCP v 0Ã n Z â4Ô ³ á i-net.com.cn Ä domain-name i-net.com.cn

,Ì G Q ¸

Q ¸	£EÄ
dns-server	n DHCP v 0Ã,X DNS á u <
ip dhcp pool	n DHCP "4 á + È JE¯ 9 DHCP "4G!5B õ ã Ä

G ÄAÈ â	´

Q ¸ Z Æ

(Ë	AÈ â
-	-

4.1.7 hardware-address

?U n DHCP v 0Ã,X.@ Ê È*ü DHCP "4G!5B Q ¸ **hardware-address** ÄA¹ Q ¸,X **no** 6 ã Ã ¹ ôL8.@ Ê ,X n Ä

hardware-address hardware-address type

no hardware-address

– DAÈ â

– D	£EÄ
hardware-address	n DHCP v 0Ã,X MAC Ä
type	ÛAšDHCP v 0Ã,X.@ Ê G Ä #A, ÈÃ ¹*ü +0ú ê D + n Ä +0ú EÝNM Ö „ ethernet „ ieee802 D +EÝNM Ö „ 1 Ä10M ethernet Å „ 6 ÄIEEE 802 Å

5 ,ÕG!5B	5 ,Õ"u Ý.@ Ê Ä V p n .@ Ê Ê"uC³EÝNM È5 ,Õ ethernet Ä
Q ¸ õ ã	DHCP "4G!5B õ ã Ä
S*ü Û Ð	¾ Ý üE¯> DHCP ¹4¥ n n Ê È ! Ã ¹ S*üA¹ Q ¸ Ä

,Ì G Q ¸

Q ¸	£EÄ
client-identifier	n DHCP v 0Ã,X Ô ÛAš Ä ¹&• Lh Ô,X AE¯ D></ Å Ä
hardware-address	n DHCP v 0Ã,X.@ Ê Ä
ip dhcp pool	n DHCP "4 á + È JE¯ 9 DHCP "4G!5B õ ã Ä

G ÄAÈ â ´

Q ¸Z Æ

(Ë	AÈ â
-	-

4.1.9 ip address dhcp

?U S k ¹ þ5% ê5Ù PPP ÃHDLC ÃFR Õ>™,X y ·6Ñ óEîE› DHCP 9‹ k IP µ C È*ü y ·G!5B Q ¸ **ip address dhcp** ÄA¹ Q ¸,X **no** 6 ã Ã ¹ ª#\A¹G!5B Ä

ip address dhcp

no ip address dhcp

– DAÈ â

– D	£EÄ
-	-

5 ,ÕG!5B 5 ,Õ y · á6ÑEîE› DHCP 9‹ k IP Ä

Q ¸õ ã y ·G!5B õ ã

S*ü Û Ð RGOS EC Ê,XDHCP v 0Ã È üAË" IP Ê ÈE¬?U" DHCP á u < ¤ o h þG!5B – D µ C Ö1 ÅDHCP EÝNM È v 0Ã $5% }-Õ × 2 ÅDHCP EÝNM È à Ô $5% Þ,X5% G µ C × 3 ÅDHCP EÝNM È DNS á u < µ C × 4 ÅDHCP EÝNM5 È â4Ô ³ á ×DHCP EÝNM 44 ÈWINS á u < µ C Ä

RGOS EC Ê,X v 0Ã AŒ ü PPP ÃFR ÃHDLC E²CÃ ÞEîE›dhcp 9‹ k ÈE- þLÔ?U á u <,X Õ È,Â ! å À,X á u < ÕA¹ s6Ñ

G!5B _ ¹ ßG!5B _ $ È S k FastEthernet 0 0Ã ·7¾ |9‹ k IP Ä

interface fastEthernet 0

ip address dhcp

,Ì G Q ¸

Q ¸	£EÄ
dns-server	n DHCP v 0Ã,X DNS á u <

	ip dhcp pool	n DHCP "4 á + È JE¯ 9 DHCP "4G!5B õ ã Ä

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

	-	-

4.1.11 ip dhcp ping packet

?UG!5BDHCP á u < "# †0U Ê Èping A¹ ,X õ D È*ü < G!5B Q ¸ **ip dhcp ping packet** ÄA¹ Q ¸,X **no** 6 ã 6 á5 ,ÕG!5B Ä

ip dhcp ping packet [number]

no ip dhcp ping packet

– DAÈ â	– D	£EÄ
	number	Ä ÃEÝ Å8× È ¢ 0 10 È0 ></ GKÁping ¡ 0 Ä5 ,Õ ping ø þ Ù Ä

5 ,ÕG!5B	5 ,Õ ping Ù Ø D 2 Ä
Q ¸ õ ã	< G!5B õ ã Ä
S*ü Û Ð	DHCP á u < ¢ DHCP "4 A© Ò ÚG! IP Ê È î*ü ping ¡ 0 9 "# A¹ ú Æ>• J W 4*ü È V p 4*ü A„) ß 9 È V p"u 4*ü ÚG!4- DHCP v 0Ã Ä Ping ¡ 05 ,Õ ¥EÕ ø þ D B Ù È Ô î Ã ¹ ¥EÕ 10 þ Ù Ä
G!5B _	¹ ßG!5B _ $ È Ú ping ¡ 0 ¥EÕ D B Ù DA' 3 þ Ä ip dhcp ping packets 3

,Ì G Q ¸	Q ¸	£EÄ
	clear ip dhcp conflict	#ÙL8DHCP Z Æ †0UA„) Ä
	ip dhcp ping timeout	G!5BDHCP á u < ping ¡ 01 Y h1(,XCY Ê ÊKÈ Ä ü?˜ n ÊKÈ Y Ý,X ping ÙFÑ"u Ý k h1(ÈAÈ âA¹ Ã ÚG!,X × ú í A„) †0U Ä
	show ip dhcp conflict	/ DHCP á u < ü ÚG! Ê È " # ,X †0U Ä

G ÄAÈ â	´

Q ¸ Z Æ	(Ë	AÈ â
	-	-

	G!5B _	Ruijie(config)#	ipv6 route	2001::/64 vlan 1 2005	::1

	G!5B _	Ruijie(config)#	ipv6 route	2001::/64 vlan 1 2005	::1

	G!5B _	Ruijie(config)#	ipv6 route	2001::/64 vlan 1 2005	::1

5 ,ÕG!5B ´

Q ¸ õ ã (M õ ã

S*ü Û Ð EîE›A¹ Q ¸ Ã ¹ ¹,ßCÃ+ ><,X µ C Ä

Ruijie# show ipv6 route

G!5B _

5 ,ÕG!5B	´
Q ¸ õ ã	(M õ ã
S*ü Û Ð	EîE›A¹ Q ¸ Ã ¹ ¹,ßCÃ+ ><,X µ C Ä

Ruijie# show ipv6 route

G!5B _

5 ,ÕG!5B ´

Q ¸ õ ã (M õ ã

S*ü Û Ð EîE›A¹ Q ¸ Ã ¹ ¹,ßCÃ+ ><,X µ C Ä

Ruijie# show ipv6 route

G!5B _

5 ,ÕG!5B ´

Q ¸ õ ã (M õ ã

S*ü Û Ð EîE›A¹ Q ¸ Ã ¹ ¹,ßCÃ+ ><,X µ C Ä

Ruijie# show ipv6 route

G!5B _

Q ¸ –5×-IP CÃ+

Ú ` Ÿ4¡ IP CÃ+ Q ¸ –5×,Ì G Y • È Ù À ¹ ß0´8V Ö

1. G!5B #A, ´ G Q ¸
2. G!5BRIP Q ¸
3. G!5BRIPNG Q ¸
4. G!5BOSPF2 Q ¸
5. G!5BOSPFV3 Q ¸

1

1.1

1.1.1 accept-lifetime

?U ü šJyJÒ šJy õ ã Û nA¹ šJy,X y • å,X*ó , ó ÈAË S*ü Q ¸ **accept-lifetime** ÄA¹ Q ¸,X **no** 6 ã 6 á5 ,Õ Ä

accept-lifetime start-time {**infinite** | end-time | **duration** seconds}

[redacted]

£EÄ
È ÈAÁ"© V ß Ö
e year
n year

Ô ½,X Ã Û n ÊKÈ Jun 1 È1993

Ô Ÿ ÊKÈ Ô,È u „K½Sì (Í€¦ Í¹Är)a hev,@F8005

	00:00:00 Dec 12 2011

,Ì G Q ¸

Q ¸	£EÄ

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

1.1.2 ip default-network

?UG!5B5 ,Õ5%4° ÈAË S*ü < G!5B Q ¸**ip default-network** ÄA¹ Q ¸,X no 6 ã Ã ¹ ôL85 ,Õ5%4° Ä

ip default-network network

no ip default-network network

– DAÈ â

– D	£EÄ
network	5 ,Õ5%4°,X5%4° Ë Ä

5 ,ÕG!5B 5 ,Õ 0.0.0.0/0 Ä

Q ¸ õ ã < G!5B õ ã Ä

S*ü Û Đ G!5B5 ,Õ5%4°,X,Â,X Z {*ó5 ,ÕCÃ+ ÈEîE› **default-network** {*ó5 ,ÕCÃ+ LÔ?U$µ C‡ ¹ ß 5 Ê ÖA¹5 ,Õ5%4° á ,ÈE² y ·5%4° È üCÃ+ >< Ã E’ Ä

5 ,Õ5%4° ¹“*” Ë Ô È></ W 5 ,ÕCÃ+ ,X íEÝ5Ù Ä V p5 ,Õ5%4° Ý connected CÃ+ `"u Ý ß ÔCÇ,XCÃ+ È í5 ,ÕCÃ+ ?U" M- ÕCÃ+ Ä

G!5B _ _ 1 Ö ¹ ß,XG!5B _ $ È Ú 192.168.100.0 5%4°A’ 5 ,Õ5%4° È+ bG!5B Z A¹5%4°,XM-ÕCÃ+ È ¹A’ Û Ú7¾ | {*ó Ô 55 ,ÕCÃ+ Ä

Ruijie(config)# ip route 192.168.100.0 255.255.255.0 serial 0/1

Ruijie(config)# ip default-network 192.168.100.0

_ 2 Ö ¹ ß,XG!5B _ $ È Ú 200.200.200.0 5%4°A’ 5 ,Õ5%4° È ¾?U ' 200.200.200.0 Î)„ üCÃ+ >< ÈA¹CÃ+ ä 5 ,ÕCÃ+ Ä

Ruijie(config)# ip default-network 200.200.200.0

,Ì G Q ¸

Q ¸	£EÄ
show ip route	/ IP CÃ+ >< Ä

	Q ¸ "u Ý ge ê5Ù le GK + È í ip-prefix ¤ o Z2'.B,X !4Ô8× È G! Ä V p ™Eg 9 ge Èí G!8× È minimum-prefix-length 32 ÄV p ™Eg 9 le È í G!8× È ip-prefix ,X }-ÕKS z maximum-prefix- length Ä V p `5ÙFÑ ÝEg 9 È í G!8× È ¢ minimum-prefix-length maximum-prefix- length Ä G Èip-prefix }-Õ Ã minimum-prefix-length ` maximum-prefix-length ,X G2Ï Ö ip-prefix }-ÕKS z < minimum-prefix-length < maximum-prefix-length <= 32 Ä
G!5B –	¹ ß S*ü Ú ¥ ë><E¯> E›$¸,X _ $ È!¨ V?U Í OSPF #A, G¡ Ú ¥ RIP ÊEg Î,XCÃ+ Ú ¥ µ C Ý';,Â,X IP E¯> E›$¸ ÈE›$¸?˜ í ü G6(,X IP !4Ô ë><n (_ V ¾ AŒ,Â,X IP ü 201.1.1.0/24 8× È Y,XCÃ+ µ C>• Ú ¥ Î •) È í Ý ß ë!9PxE¯> G!5B Ö Ruijie# configure terminal Ruijie(config)# ip prefix-list pre1 permit 201.1.1.0/24 Ruijie(config)# router ospf Ruijie(config-router)# distribute-list prefix pre1 out rip Ruijie(config-router)# end

,Ì G Q ¸

Q ¸	£EÄ
--	-

G ÄAÈ â ´

Q ¸ Z Æ

(Ë	AÈ â
-	-

1.1.4 ip prefix-list description

?U Ô þ !4Ô ë><#Ï t [+ £EÄ ÈAË S*ü **ip prefix-list description** Q ¸ ÄA¹ Q ¸,X **no** 6 ã ô L8 Ô þ !4Ô ë><,X £EÄ Ä

ip prefix-list prefix-lis-name **description** descripton-text

– DAÈ â

– D	£EÄ
prefix-lis-name	!4Ô ë>< á +
descripton-text	!4Ô ë>< [+ £EÄ

5 ,ÕG!5B "u Ý#Ï t !4Ô ë>< [+ £EÄ

Q ¸ õ ã < G!5B õ ã

S*ü Û Ð ´

G!5B _	¹ ß _ $ IP !4Ô ë><#Ï t [+ £EÄ **Deny routes from Net-A** Ö Ruijie# configure terminal Ruijie(config)# ip prefix- l ist pre description Deny routes from Net-A

,Ì G Q ¸		
	Q ¸	£EÄ
	-	-

G ÄAÈ â	´

Q ¸ Z Æ		
		AÈ â
	-	-

1.1.5 ip prefix-list sequence-number

?U !4Ô ë>< *ü f c s6Ñ ÈAË S*ü **ip prefix-list description** t` ` 6G N0š¢5Æa@ øœ‘ V0‡3m "ÅS*ü

	-	-

1.1.6 ip route

?UG!5BM- ÕCÃ+ ÈAË S*ü < G!5B Q ¡p route ÄA¹ Q ¸,X no 6 ã ôL8 ÆG!5B,XM- ÕCÃ+ Ä

ip route network net-mask {ip-address | interface [ip-address]} [distance] [**tag** tag] [permanent] [**weight** number] [disable | enable]

– DAÈ â

– D	£EÄ
network	,Â Û5%4°,X5%4°
net-mask	,Â Û5%4°,X }-Õ
ip-address	M- ÕCÃ+ ,X ß ÔCÇ
Interface	Ä ÃEÝ ÅM- ÕCÃ+ ,X ß ÔCÇ Î ·
distance	Ä ÃEÝ ÅM- ÕCÃ+ ,X1u)ÚC±/•
tag	Ä ÃEÝ ÅM- ÕCÃ+ ,XŤag
permanent	Ä ÃEÝ Å" CÃ+ ÛAš
number	Ä ÃEÝ ÅM- ÕCÃ+ ,X G¡
disable/enable	Ä ÃEÝ ÅM- ÕCÃ+ ,X S6Ñ ÛAš

5 ,ÕG!5B 5 ,Õ ´M- ÕCÃ+ Ä

Q ¸ õ ã < G!5B õ ã Ä

S*ü Û Ð

M- ÕCÃ+ ,X5 ,Õ1u)ÚC±/• 1 ÈÆîE›A'5B1u)ÚC±/• È Ã ¹ AŒ | ÕCÃ+ : ,XCÃ+ ?Z,ªM- ÕCÃ+ È ¾ Ý ' | ÕCÃ+ : á Ê È ! S*üM- ÕCÃ+ ÄEîE›A'5BM- ÕCÃ+ ,X1u)ÚC±/• Ã ¹ r)„4"CÃ,X Û Ñ È!8 Ê,XM- ÕCÃ+ È Ô8 œ/Ä #B |CÃ+ Ä!¨ V OSPF CÃ+ #A,,X1u)ÚC±/• 110 È Ã ¹ ÚM- ÕCÃ+ ,X1u)ÚC±/•A'5B 125 ÈE- 'C¥ OSPF ,X4"CÃ Lp Ê È D B# G£7¾' Ã ¹ Û 6 M- ÕCÃ+ ,X4"CÃ Þ Ä

M- ÕCÃ+ ,XT¬Ax G¡ 1 È Ã ¹ S*ü **show ip route weight** Q ¸ ¹,ßM2T¬Ax G¡,XM- Õ CÃ+ Ä G¡ – D weight *ü b r)„ WCMP s6Ñ È ' , üBóEQ >5CÃ+ Ã E' ¤ Ê È x 6 î B Ø 5CÃ+ ,X G¡ ÚG! D B# G£ È weight EW û,XCÃ+ î Ú ™EW î,X D B y [ÈEW ã5Ù î Ú ™EW å,X D B y [ÄCÃ+ <,X WCMP L$ Ô8 32 È5à x 6 í+ b Ø! 8ƒ(6Ñ Õ,X G¡ á à È ¹ J WCMP L$ DG£ â _ Ë Ý G × 'BóEQ >5CÃ+ ,X G¡ ` û bA¹L$ Ê ÈCY ÎL$,XCÃ+ á î*ó Ä

M- ÕCÃ+ ,X S6Ñ Û « { M- ÕCÃ+ ú Ý È V p ´ í á î*ü bE@ ¥ Ä" CÃ+ G!5B E¯E@ ¥>< ÈL8M2EîE›5%1u 9 ôL8] È ú í Ú Ô,È , ü Ä

?UEîE› ¹ þ5% y ·G!5BM- ÕCÃ+ Ê È G£FS ! ß ÔCÇ,È y y · Ä V ip route 0.0.0.0 0.0.0.0 Fastethernet 0/0 Å ÄE- îA}A' Û?• k Ý þ-¹,Â Û5%4° ÈFÑ ,ÈE² ü Fastethernet 0/0 y · È´!8 Í!£ þ,Â Û FÑ ¥EÕ Ô þ ARP AË" È î 4*üAŒ î CPU ` Y ,C $d Ä ¹ Ô8 á ÎA, ÚM- ÕCÃ+ ,È y Û å ¹ þ5% y · Ä

G!5B _	¹ ß,XG!5B _ $ È r t Z Ô 5 172.16.100.0/24 ,Â Û5%4°,XM- ÕCÃ+ È ß ÔCÇ 192.168.12.1 È1u)ÚC±/• 115 Ä ip route 172.16.100.0 255.255.255.0 192.168.12.1 115 V pM- ÕCÃ+ "u Ý Û n y · È '!7 ¥EÕ y · Lp Ê È Ã6Ñ î S k D B# G£ ¢ J W y · ¥EÕ ÄUFS !A¹ ™ ‰ ¥*ó ÈLÔ?U Û n y · Ä¹ ß,XG!5B _ $ È,Â Û5%4° 172.16.100.0/24 ,X D B# G£ ¾6Ñ ¢fastethernet 0/0 y ·E@ ¥ Ä Ruijie(config)# ip route 172.16.100.0 255.255.255.0 fastethernet 0/0 192.168.12.1

,Ì G Q ¸	Q ¸	£EÄ
	show ip route	/ IP CÃ+ >< Ä

G ÄAÈ â	-

Q ¸ Z Æ	(Ë	AÈ â
	-	-

1.1.7 ip routing

?U *ü RGOS EC Ê,XIP CÃ+ s6Ñ È ü < õ ã ß ;> A¹ Q ¸ ÄA¹ Q ¸,X no 6 ã Ã ¹ GKÁ IP CÃ + s6Ñ Ä

ip routing

no ip routing

– DAÈ â	– D	£EÄ
	-	-

5 ,ÕG!5B	*ü IP CÃ+ Ä

Q ¸ õ ã	< G!5B õ ã

S*ü Û Ð	'A' Û ¾ 0 9 yA' Û È ê5Ù ¾ 0 VOIP 5% GA' Û Ê È Ã ¹ áLÔ?URGOS EC Ê,XIP CÃ + E@ ¥ s6Ñ ÄE- Ê Ã ¹ GKÁRGOS ,X IP CÃ+ s6Ñ Ä

G!5B ¸ÇÔ6Ñ"¸Á¢ÐÐ À 0

,Ì G Q ¸	Q ¸	£EÄ
	-	-

G ÄAÈ â ´

Q ¸ Z Æ	(Ë	AÈ â
	-	-

1.1.11 ipv6 prefix-list sequence-number

?U IPv6 !4Ô ë>< *ü f c s6Ñ ÈAË S*ü **ipv6 prefix-list description** Q ¸ ÄA¹ Q ¸,X **no** 6 ã ª#\ !4Ô ë><,X f c s6Ñ Ä

ipv6 prefix-list sequence-number

ipv6 route network | prefix-length { ipv6-address | interface [ipv6-address] } [distance] [**weight** number]

– D	£EÄ
network	,Â Û5%4°,X5%4°
prefix-length	,Â Û5%4°,X }-ÕKS z

10.1	1 Ô õ é 9A¹ Q ¸
10.4	„ r weight – D,X Õ

1.1.13 ipv6 static route-limit

?UG!5BM- ÕCÃ+ ,X 5 D ÞL$ ÈAË S*ü < G!5B Q ¸**ipv6 static route-limit** ÄA¹ Q ¸,X no 6 ã Ã ¹A'5B ²T¬AxCÃ+ 5 D Ä

ipv6 static route-limit number

no ipv6 static route-limit

– D	

– DAÈ â

– D	£EÄ
-	-

5 ,ÕG!5B *ü IPv6 CÃ+

Q ¸ õ ã < G!5B õ ã

S*ü Û Ð 'A' Û ¾ 0 9 yA' Û È ê5Ù ¾ 0 VOIP 5% GA' Û Ê È Ã ¹ áLÔ?URGOS EC Ê,XIPv6 CÃ+ E@ ¥ s6Ñ ÄE- Ê Ã ¹ GKÁRGOS ,X IPv6 CÃ+ s6Ñ Ä

G!5B – ¹ ßG!5B È GKÁ Z RGOS EC Ê,XIPv6 CÃ+ s6Ñ Ä

Ruijie# no ipv6 unicast-routing

,Ì G Q ¸

Q ¸	£EÄ
ipv6 route	G!5Bipv6 M- ÕCÃ+

^ v6 r´φm **I** Ò ˚

Ъэ - ё

ї Ѧ Ђ ъ ˘ ЛЮ ‘

1. AAA Ђ ъ
2. RADIUS Ђ ъ
3. RADIUS Ђ ъ
4. TACACS+Ђ ъ
5. 802.1X Ђ ъ
6. Web Ђ ъ
7. SSH Ђ ъ
8. GSN Ђ ъ
9. ﻲﺠ Ђ ъ
10. CPU Ђ ъ
11. DOS Ђ ъ
12. DHCP Snooping Ђ ъ
13. DAI Ђ ъ
14. IP Source Guard Ђ ъ
15. ND Snooping Ђ ъ
16. DHCPV6 SNOOPING Ђ ъ
17. arp Ђ ъ
18. NFPP Ђ ъ
19. ╖ Ђ ъ

1 AAA

1.1

1.1.1 aaa authentication dot1x

AAA 802.1X ˘ Ъ ч **aaa authentication dot1x** 802.1X Â Ъ ч no 802.1X Â

aaa authentication dot1x {**default** | *list-name*} *method1* [*method2*...]

no aaa authentication dot1x {**default** | *list-name*}

Ƃ ҂

Ƃ ҂	
aaa new-model	AAA Ь
dot1x authentication	ف 802.1X Э
username	Ҥ ك

ʌ

Ƃ ҂

ʌ	
-	-

1.1.2 aaa authentication enable

AAA Enable ˘ Ƃ ҂ **aaa authentication enable** Enable Â Ƃ ҂ no Â

aaa authentication enable default *method1* [*method2*...]

no aaa authentication enable default

default	˘ ‡ ł Ҥ й Enable ÂEnable لجي ˘ Â
method	l' local à none à group Ł ˘ 4
local	ك ¨
none	a
group	Ь ئۆ ˘ RADIUS n TACACS+ Ь ئۆ

Ƃ ҂ Â

í AAA Enable Ь˘ AAA Enable ى Â **aaa authentication enable** Ƃ ҂ Enable Â ط ˘ ł Â Enable Л ł˘ Enable ╗ Â

Ю Ҥ AAA Enable Â RADIUS

ئۇ ـا ۔ فخ RADIUS ئۇ ـا ۔ ‡

كم Â

```
Ruijie(config)# aaa authentication enable default group radius local
```

Ъ ч Â

í AAA PPP ┗ AAA PPP ى Â
aaa authentication ppp Ъ ч Л PPP Â
ط ˘ ł Â

Ю Нж ¨ и rds_ppp AAA PPP Â
RADIUS ┗ ѿ ˘ ф RADIUS ┗ ѿ
˘ ˘ ‡ ك Â

```
Ruijie(config)# aaa authentication ppp rds_ppp group radius local
```

Ъ ч

Ъ ч	
aaa new-model	AAA ┗
ppp authentication	PPP
username	Нж ك

Л

Ъ ч

Л	
-	-

1.1.5 login authentication

ф Э Login^ ~ ╗ ˘ ф Ю **login authentication** Ъ ч Login Â Ъ ч no ф Э Â

login authentication {**default** | *list-name*}

no login authentication

default	˘ Login Â
list-name	Нж Login Â

Ъ ч Â

Login ˘ Э Â ф Э
Login ˘ ч Ч Â ие Ик ˘ ‡
Ъ ˘ Э Login a ˘ Ик Login
Â

Ю Ик ¨ и list-1 AAA Login Â к
Â ы ф VTY 0 - 4 Э Â

```
Ruijie(config)# aaa authentication login list-1 local
Ruijie(config)# line vty 0 4
Ruijie(config-line)# login authentication list-1
```

Ъ ч

Ъ ч	
aaa new-model	AAA Ы
username	Ик к
login authentication	Login

ч

Ъ ч

ч	
-	-

1.2

1.2.1 aaa authorization commands

NAS CLI Э ˘ AAA Ъ ч ╖ Ъ ч
˘ é Ъ ч Â Ъ ч **aaa authorization commands** Â Ъ ч no AAA Ъ ч ╖ Â

aaa authorization commands *level* {**default** | *list-name*} *method1* [*method2*...]

no aaa authorization commands *level* {
{ Ъ Ь

method	l' none à group Ł ˘ 4
none	a
group	Ł ئۇ ˘ TACACS+ Ł ئۇ

AAA Ъ ч ╖ Â

Ъ ч Â

RGOS Л Ъ ч ˘ يي Ъ ч ˘ AAA Ъ ч Ł ئۇ Э˘ Ł ئۇ Ъ ч˘ ‡ Ъ ч ˘ ‡ Ъ ч a ˘ Ъ ч Â Ъ ч Ъ ч ˘ Ъ ч ^ ˘ Ъ ч 14 ЛЬЭ Л ˘ ‡ Ъ ч 14 ~ Â Ъ ч ŧ˘ è ффх Ъ ч Э˘ ‡ a Â

Ю TACACS+ Ł ئۇ 15 Ъ ч

```
Ruijie(config)# aaa authorization commands 15 default group tacacs+
```

Ъ ч	
aaa new-model	AAA Ł
authorization commands	ффх Э Ъ ч

Л

Ъ ч	**Л**
-	-

1.2.2 aaa authorization config-commands

AAA ^ è ~ Ю Ъ ч ˘ Ъ ч **aaa authorization config-commands** Â Ъ ч no AAA Ю Ъ ч ╖ Â

aaa authorization config-commands

no aaa authorization config-commands

-	-

a ЮЪ ҳ Â

Ъ ҳ Â

^ ~ Ю Ъ ҳ ˇ Л Ћ Ъ ҳ no
╖ ˇ ‡ è Ю Ъ ҳ a Ъ ҳ Л Ћ Â

Ю Ю Ъ ҳ ╖ ˙

```
Ruijie(config)# aaa authorization config-commands
```

Ъ ҳ	
aaa new-model	AAA ┺
aaa authorization commands	⊮ AAA Ъ ҳ

Л

Ъ ҳ	**Л**
-	-

1.2.3 aaa authorization console

AAA Л ˇ Ъ ҳ ˇ Ъ ҳ **aaa authorization console** Â Ъ ҳ no AAA Л Ъ ҳ ╖ Â

aaa authorization console

no aaa authorization console

-	-

a Л Ъ ҳ Â

Ъ ҳ Â

RGOS ǂ Л p è ˇ Л Ћ Л ˇ Ъ ҳ Â Л Ъ ҳ ╖ ˇ ‡ Л

Ъ ҳ a Â

Ю л Ъ ҳ ╖

```
Ruijie(config)# aaa authorization console
```

RGOS NAS CLI ˘ è CLI ^ 0~15 ˜ Â
Login ˘ Exec Â Exec ˘ ‡
CLI Â
Exec ł˘ è ƒ Exec Э˘ ‡ a
Â

Ю RADIUS ┗ ъ Exec ·

```
Ruijie(config)# aaa authorization exec default group radius
```

Ъ ч	
aaa new-model	AAA ┗
authorization exec	ƒ Э
username	Нж ك

Ъ ч

л	
-	-

Ъ ч

1.2.5 aaa authorization network

AAA ┗ ^ PPP ä SLIP ˜ ˘
Ъ ч **aaa authorization network** Â Ъ ч no AAA ╖ Â

aaa authorization network {**default** | *list-name*} *method1* [*method2*...]

no aaa authorization network {**default** | *list-name*}

default	· ˘ ‡ ł Нж ù Network Â
method	ľ none ä group Ł ˘ 4
none	a
group	┗ ъ ˘ RADIUS n TACACS+ ┗ ъ

AAA Network ╖ Â

Ъ ч Â

RGOS ┗ PPP ЖSLIP Â ˘
‡ Â
Л Лъ Ь a˚ ˘ б ˘ ط ˘
ł ˘ ˘ ‡ a Ą è ł
Â
RADIUS TACACS+ ┗ ئۇ تي Â Лъ
فخ جلي Э ˘ Л Л Â

Ю RADIUS ┗ ئۇ ┗ ·

```
Ruijie(config)# aaa authorization network default group radius
```

Ъ ч

Ъ ч	
aaa new-model	AAA ┗
aaa accounting	Нж AAA
aaa authentication	Нж AAA
username	Нж كم

Л

Ъ ч

Л	
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1.2.6 authorization commands

Ъ ч فخ Э˘ Ъ ч **authorization commands** Â Ъ ч no Л Э Ъ ч ╖ Â

authorization commands *level* {**default** | *list-name*}

no authorization commands *level*

level	Ъ ч ˘ тт 0~15˝ ā ١ Ъ ч ł Â
default	˘ Ъ ч Â
list-name	Нж Ъ ч Â

AAA Ъ ч ╖ Â

Ъ ҳ Â

Ъ ҳ ˘ Э Â фг Э Ъ ҳ ˘ ʌ ҳ Â ﻲﻲ Ж ˘ ‡ ъ ˘ Э Ъ ҳ a ˘ Ж Ъ ҳ Â

Ю ̈ ѝ cmd Ъ ҳ ˘ 15 Ъ ҳ ˘ TACACS+ ѝ ˛ˇ ˛ ط none Â ɨ VTY 0 – 4 Э˙

```
Ruijie(config)# aaa authorization commands 15 cmd group tacacs+ none
Ruijie(config)# line vty 0 4
Ruijie(config-line)# authorization commands 15 cmd
```

Ъ ҳ

Ъ ҳ	
aaa new-model	AAA ˛
aaa authorization commands	Ж AAA Ъ ҳ

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Ъ ҳ

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1.2.7 authorization exec

Exec фг Э˘ Ъ ҳ **authorization exec** Â Ъ ҳ no ʌ Э Exec ╖ Â

authorization exec {**default** | *list-name*}

no authorization exec

default	˘ Exec Â
list-name	Ж Exec Â

AAA Exec ╖ Â

Ъ ҳ Â

Exec ˘ Э Â فخ Э
Exec ˘ ٨ ч Â يي Нж ˘ ‡
ъ ˘ Э Exec a ˘ Нж Exec
Â

Ю ¨ й exec-1 Exec ˘ RADIUS й ┗ئۇ˘
┗ئۇ ط none Â ł VTY 0 – 4 Э'

```
Ruijie(config)# aaa authorization exec exec-1 group radius none
Ruijie(config)# line vty 0 4
Ruijie(config-line)# authorization exec exec-1
```

Ъ ч

Ъ ч	
aaa new-model	AAA ┗
aaa authorization commands	Нж AAA Exec

٨

Ъ ч

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1.3

1.3.1 aaa accounting commands

˘ NAS Э Ъ ч ˘
Ъ ч **aaa accounting commands** Â Ъ ч no ٨ Ъ ч ╖ Â

aaa accounting commands *level* {**default** | *list-name*} **start-stop** *method1* [*method2*...]

no aaa accounting commands *level* {**default** | *list-name*}

level	Ъ ч ˘ тг 0~15˝ ā ١ Ъ ч ˘ Â
default	˘ ‡ ł Нж й Ъ ч Â
list-name	Нж Ъ ч ˘ ٨ Л Ъ Â
method '	Ї **none** à **group** Ł ˘ 4 '
none	a

	group	ᒐ ᒪ ᒐ ᒪ TACACS+ ᒐ ᒪ
	ℸ	
Ƒ ҁ	Â	

RGOS È Î Ý …að 0 °A CS Æ↑ # ϙ M>

list-name	Exec Â
method	**none à group** 4
none	
group	RADIUS TACACS+

Ъ ҷ Â

RGOS Exec none Exec Â

NAS

1.3.4 aaa accounting update

í ╖ ˘ Ɓ ३ **aaa accounting update** Ɓ ३˘ Ɓ ३
Â Ɓ ३ no ╖ Â

aaa accounting update

no aaa accounting update

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╖ Â

Ɓ ३ Â

í AAA Ꞗ˘ ‡ a Â í AAA Ꞗ˘ ‡
Ɓ ३ Â

IO Â
```
Ruijie(config)# aaa new-model
Ruijie(config)#
```

Ɓ ३	
aaa new-model	AAA Ꞗ
aaa accounting network	ⱵⱾ

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1.3.5 aaa accounting update periodic

í ╖ ˘ Ɓ ३ **aaa accounting update periodic** Ɓ ३˘ Ɓ ३ Â Ɓ ३ no Â

aaa accounting update periodic *interval*

no aaa accounting update periodic

interval	˘ Ⱦ¶ ѝ Æ˘ ѝ 1¶ Â

Ъ ҳ ˘ Э Â ف Э Ъ
ҳ ˘ ٨ ҳ Â ي Ж ˘ ‡
ъ ˘ Э Ъ ҳ a ˘ Ж Ъ ҳ
Â

Ю ¨ й cmd Ъ ҳ ˘ 15 Ъ ҳ ˘ TACACS+
й ˘ئۇ ـ ئۇ ـ ط none Â ł VTY 0 – 4
Э˙

```
Ruijie(config)# aaa accounting commands 15 cmd group tacacs+ none
Ruijie(config)# line vty 0 4
Ruijie(config-line)# accounting commands 15 cmd
```

Ъ ҳ	ך	Ե

ъ ˘ Э Exec a ˘ Ж Exec
Â

Ю ¨ й exec-1 Exec ˘ RADIUS й ˘ц ц
ц ы none Â ч VTY 0 – 4 Э'

```
Ruijie(config)# aaa accounting exec exec-1 group radius none
Ruijie(config)# line vty 0 4
Ruijie(config-line)# accounting exec exec-1
```

Ъ ч

Ъ ч	
aaa new-model	AAA ы
aaa accounting commands	Ж AAA Exec

л

Ъ ч

л	
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1.4 AAA

1.4.1 aaa domain

аа ˘ аа Â Ъ ч no л Ъ ч Â

aaa domain {**default** | *domain-name*}

no aaa domain {**default** | *domain-name*}

default	˘ аа
domain-name	аа ¨

аа Â

Ъ ч Â

ЦЧ аа ¨ AAA ы Âdefault й аа ˘ ≠ аа ˘
Â *domain-name* й аа ¨ ˘ аа ¨ ˘ ‡
аа Â 32 аа Â

IO

Ruijie(config)#

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Ъ ҳ

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1.4.3 access-limit

ѫ ˘ IEEE802.1x ’ Ъ ҳ no ʌ Ъ ҳ Â

access-limit *num*

no access-limit

num	ѫ ˘ IEEE802.1x

Ю a Â

Ъ ҳ ѫ Â

Ъ ҳ ѫ Â

Ю ѫ̈ й ruijie.com ѫ й 20

```
Ruijie(config)# aaa domain ruijie.com
Ruijie(config-aaa-domain)# access-limit 20
```

Ъ ҳ

Ъ ҳ	
aaa new-model	AAA Ь
aaa domain enable	ѫ̈ لجي AAA Ь
show aaa domain	ѫ

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Ъ ҳ

ʌ	
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1.4.4 accounting network

ѳ ѫ Ю Network ˘ Ъ ҳ no ʌ Ъ ҳ Â

accounting network {**default |** *list-name*}

	ғҳ ˘ ˘ default Â
Ъ ҷ	ањ Â
	ѝ ањ IEEE802.1x Â

	Ю ањ IEEE802.1x ‘
	`Ruijie(config)# aaa domain ruijie.com`
	`Ruijie(config-aaa-domain)# authentication dot1x default`

Ъ ҷ	
aaa new-model	AAA Ь
aaa domain enable	ањ ‟ لجي AAA Ь
show aaa domain	ањ

Ѧ

Ъ ҷ	
Ѧ	
-	-

1.4.6 authorization network

ғҳ ањ Ю Network ˘ Ъ ҷ no Ѧ Ъ ҷ Â

authorization network {**default** | *list-name*}

no authorization network

default	˘
list-name	‟

	ғҳ ˘ ˘ default Â
Ъ ҷ	ањ Â
	ѝ ањ Â

IO

```
Ruijie(config)# aaa domain ruijie.com
Ruijie(config-aaa-domain)# authorization network default
```

Ъ ҳ

Ъ ҳ	
aaa new-model	AAA Ь

	show aaa domain	֏֏
⁄		
	-	-

1.4.8 show aaa domain

֏֏ & Â

show aaa domain [**default** | *domain-name*]

Ni ŵ ɯ ʻ

1.5 AAA

1.5.1 aaa group server

AAA ┗ ئۇ Â Ъ ҁ no ┗ ئۇ Â

aaa group server {**radius** | **tacacs+**} *name*

no aaa group server {**radius** | **tacacs+**} *name*

name	┗ ئۇ ٨ ˘ a ѝ ľ radius Ł˘ ľ tacacs+ Ł˘ ѣ ѝ RADIUS ņ TACACS+ ┗ ئۇ Â

Ъ ҁ Â

Ъ ҁ AAA ┗ ئۇ ˘ RADIUS ņ TACACS+ ┗ ئۇ Â

Ю Â

```
Ruijie(config)# aaa group server radius ss
Ruijie(config-gs-radius)# end
Ruijie# show aaa group
Group Name:  ss
Group Type:  radius
Referred:    1
Server List:
```

Ъ ҁ	
show aaa group	aaa ┗ ئۇ

٨

Ъ ҁ	٨	
	-	-

1.5.2 server

╕ AAA ┗ ئۇ ┗ ئۇ˘ no Â

server *ip-addr* [**authen-port** *port1*] [**acct-port** *port2*]

no server *ip-addr* [**authen-port** *port1*] [**acct-port** *port2*]

ip-addr	┺ ئۇ ip ھ ك
port1	┺ ئۇ ^ RADIUS ┺ ئۇ ~
port2	┺ ئۇ ^ RADIUS ┺ ئۇ ~

┺ ئۇ

Ъ ҳ ┺ ئۇ Â

┺ ئۇ ╗ ┺ ئۇ˘ a Â

Ю Â

```
Ruijie(config)# aaa group server radius ss
Ruijie(config-gs-radius)# server 192.168.4.12
acct-port 5 authen-port 6
Ruijie(config-gs-radius)# end
Ruijie# show aaa group
Group Name:  ss
Group Type:  radius
Referred:   2
Server List:
IP Address: 192.168.4.12
Authentication Port: 6
Accounting Port: 5
Referred:  1
```

Ъ ҳ	
aaa group server	aaa ┺ ئۇ
show aaa group	aaa ┺ ئۇ

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1.5.3 show aaa group

AAA ᅶ ᄭᅳ Â

show aaa group

aaa local authentication attempts *max-attempts*

*max-attempts*ˊ

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1.6.4 clear aaa local user lockout

clear aaa local user lockout {**all** | **user-name** <*word*>}

<*word*>	ID

-	-

Ъ ३ EXEC Â

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-	-

1.6.6 show aaa method-list

AAA Â

show aaa method-list

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Ъ ३ Â

Ъ ३ AAA Â

Ю AAA Â

```
Ruijie# show aaa method-list
Authentication method-list
aaa authentication login default group radius
aaa authentication ppp default group radius
aaa authentication dot1x default group radius
```

```
aaa authentication dot1x san-f local  group angel group rain none
aaa authentication enable default group radius
Accounting method-list
aaa accounting network default start-stop group radius
Authorization method-list
aaa authorizating network default group radius
```

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2 RADIUS

2.1 RADIUS

2.1.1 ip radius source-interface

radius ಮ ಱ Ð ¥ **ip radius source-interface** Â Ð ¥

2.1.2 radius attribute

radius ttribute{*<id>* | **down-rate-limit** | **dscp** | **mac-limit** | **up-rate-limit**} **vendor-type** *<type>*

no radius attribute {*<id>*|**down-rate-limit** | **dscp** | **mac-limit** | **up-rate-limit**} **vendor-type**

id	id <1-255>
type	type

id		type
1	max down-rate	1
2	qos	2
3	user ip	3
4	vlan id	4
5	version to client	5
6	net ip	6
7	user name	7
8	password	8
9	file-diractory	9
10	file-count	10
11	file-name-0	11
12	file-name-1	12
13	file-name-2	13
14	file-name-3	14
15	file-name-4	15
16	max up-rate	16
17		

Ѣ ҳ	Ѣ ҳ	
	radius set qos cos	radius Ю qos ѝ cos

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Ѣ ҳ	ʌ	
	-	-

2.1.3 radius-server attribute 31

RADIUS Calling-Station-ID ˆ ﺝﻲ MAC˜ ˘ Ѣ ҳ

radius-server attribute 31 Â Ѣ ҳ **no** ѝ Â

radius-server attribute 31 mac format {ietf | normal | unformatted}

no radius-server attribute 31 mac format

	- N lÚ ﻑ ` Ml Y n

2.1.5 radius-server host

RADIUS ┺ ئۇ ў ˘ Ъ ъ **radius-server** Â Ъ ъ **no**
RADIUS ┺ ئۇ ў Â

radius-server host { *ipv4-address* | *ipv6-address*} [

Ъ ъ	ѧ	
	-	-

2.1.6 radius-server key

Ня ┗ЮЮ ~ б RADIUS ┗ЮЮ ъ˘
Ъ ъ **radius-server key** Â Ъ ъ no ѧ ъ Â

radius-server key *text-string*

no radius-server key

text-string	ъ

ъ Â

Ъ ъ Â

ъ n RADIUS ┗ЮЮ Âй n RADIUS
┗ЮЮ ˘ n RADIUS ┗ЮЮ Э Ня ˚ ъ Â

Ю Ня RADIUS ┗ЮЮ ъ й aaa

```
Ruijie(config)# radius-server key aaa
```

no radius-server retransmit

retries	RADIUS Â

ѝ 3Â

Ъ ъ Â

AAA ф Ю ъ ъ Â
ъ ъ ф ъ RADIUS ъ
˘ Â

Ю ѝ 4
```
Ruijie(config)# radius-server retransmit 4
```

Ъ ъ	
radius-server host	Н RADIUS ъ ъ ў
radius-server key	Н RADIUS ъ
radius-server timeout	Н RADIUS ъ

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Ъ ъ

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Ю ЂЖ ѝ 10 ՝

```
Ruijie(config)# radius-server timeout 10
```

Ƃ ҂	
radius-server host	ЂЖ RADIUS ᵷ ᵹ ў
radius-server retransmit	ЂЖ RADIUS
radius-server key	ЂЖ RADIUS ҂

Ѧ

Ƃ ҂	Ѧ	
	-	-

2.1.9 radius set qos cos

radius Ю qos ѝ cos

radius set qos cos

no radius set qos cos

-	-

qos ѝ dscp

Ƃ ҂ Â

Ƃ ҂˘ Ѧ Л Ъ Ю qos ѝ cos ˘ ѝ dscp

Ю ՝

```
Ruijie(config)# radius set qos cos
```

Ƃ ҂	
radius vendor-specific extend	Radius ѝ a ى id

⁄

Ъ ३	⁄	
	-	-

2.1.10 radius vendor-specific extend

ѝ a ى id Â

radius vendor-specific extend

no radius vendor-specific extend

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2.2 RADIUS

2.2.1 debug radius

RADIUS Â Ъ ३ no RADIUS Â

debug radius [**event | detail**]

no debug radius [**event | detail**]

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Ъ ३ EXEC Â

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2.2.2 show radius parameter

RADIUS ᄂ ᄋᄋ Â

show radius parameter

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Ъ ३ Â

Ɓ ३ radius ┗ ﾀ Â

```
Ruijie# show radius parameter
Server Timout:   5 Seconds
Server Deadtime: 5 Minutes
Server Retries:  3
Server Key:      ******
```

Ɓ ३

Ɓ ३	
radius-server host	⊬ RADIUS ┗ ﾀ ў
radius-server retransmit	⊬ RADIUS
radius-server key	⊬ RADIUS ३
radius-server timeout	⊬ RADIUS

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ﾉ	
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2.2.3 show radius server

RADIUS ┗ ﾀ Â

show radius server

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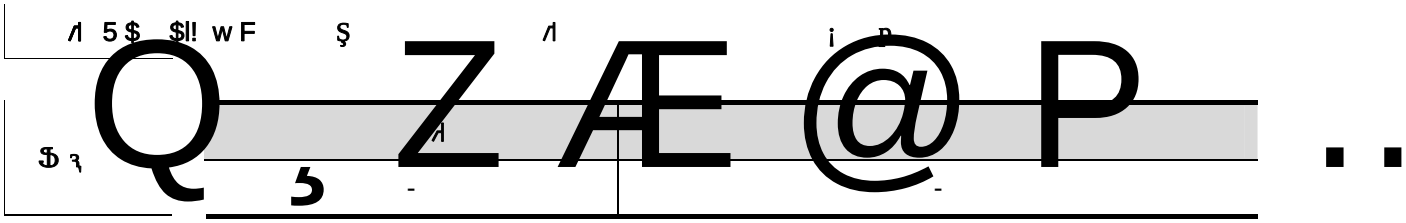
```
server state: ready
server ip : 192.168.4.13
acct  port: 45
authen  port: 74
server state: ready
```

Ъ ٦	
radius-server host	⊮ RADIUS ئۇ ـا ў
radius-server retransmit	⊮ RADIUS
radius-server key	⊮ RADIUS ٦
radius-server timeout	⊮ RADIUS



2.2.4 show radius vendor-specific

RADIUS شخ Â

show radius vendor-specific

5	version to client	5
6	net ip	6
7	user name	7
8	password	8
9	file-diractory	9
10	file-count	10
11	file-name-0	11
12	file-name-1	12
13	file-name-2	13
14	file-name-3	14
15	file-name-4	15
16	max up-rate	75
17	version to server	17
18	flux-max-high32	18

3 RADIUS

3.1

3.1.1 radius dynamic-authorization-extension enable

í à RADIUS ╖ Â

radius dynamic-authorization-extension enable

no radius dynamic-authorization-extension enable

RADIUS ╖ Â

Ъ ҳ Â

í ╖ Â

1' í RADIUS ╖ Â

```
Ruijie(config)# radius dynamic-authorization-extension enable
```

Ъ ҳ	
show running-config	RADIUS ╖ í Â

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Л	
10.4(2B15)	Ъ ҳ

3.1.2 radius dynamic-authorization-extension port

RADIUS UDP Â

radius dynamic-authorization-extension port *num*

no radius dynamic-authorization-extension port

num	RADIUS UDP Â ѝ 3799 Л ҙ [1025 65535] Â

3799 Â

Ъ ҳ Â

ӧ ӑ Â

1 ӧ ѝ 4000 Â

```
Ruijie(config)# radius dynamic-authorization-extension port 4000
```

Ъ ҳ	
show running-config	RADIUS Â

Л -

Л	
10.4(2B15)	Ъ ҳ

3.2

3.2.1 show radius dynamic-authorization-extension statistics

RADIUS ╖ Â

show radius dynamic-authorization-extension statistics

Â

Ъ ҳ Â

Ъ ҳ RADIUS ╖ Â ӕ ˘
Лъ Â

.

```
Ruijie# show radius dynamic-authorization-extension statistics
Disconnect-Request Received:                          50
Incorrect Disconnect-Request Received:                 1
Disconnect-Request Dropped for Queue Full:             0
Disconnect-Request Process Timeout:                    0
Disconnect-Request Process Success:                   49
Disconnect-ACK Sent:                                  25
Disconnect-ACK Sent Failed:                            0
Disconnect-NAK Sent:                                  24
Disconnect-NAK Sent Failed:                            0
```

Ъ ३

Ъ ३	
clear radius dynamic-authorization-extension statistics	RADIUS ╖ Â

ѧ -

Ъ ३

ѧ	
10.4(2B15)	Ъ ३

3.2.2 clear radius dynamic-authorization-extension statistics

RADIUS ╖ ˘ Â

clear radius dynamic-authorization-extension statistics

Â

Ъ ३ Â

Ъ ३ RADIUS ╖ Â

.

```
Ruijie# show radius dynamic-authorization-extension statistics
```

```
Disconnect-Request Received:                          50
Incorrect Disconnect-Request Received:                 1
Disconnect-Request Dropped for Queue Full:             0
Disconnect-Request Process Timeout:                    0
Disconnect-Request Process Success:                   49
Disconnect-ACK Sent:                                 25
Disconnect-ACK Sent Failed:                           0
Disconnect-NAK Sent:                                 24
Disconnect-NAK Sent Failed:                           0

Ruijie#
```

4 TACACS+

4.1 TACACS+

4.1.1 aaa group server tacacs+

Ð ¾ TACACS+ ┗ ïÚ ˘ a˚ TACACS+ ┗ ïÚ ˙ a˚ Â

aaa group server tacacs+ *group-name*

no aaa group server tacacs+ *group-name*

4.1.2

Âȯ 3 Ń ђ

key *string*	TACACS+ client б ┗ ئۇ Â

TACACS+ ў Â

Ъ ъ Â

и TACACS+ AAA ┗ HЖ TACACS+ ┗ ئۇ Â Л Л **tacacs-server** Ъ ъ HЖ TACACS+ ┗ ئۇ Â

Ю HЖ TACACS+ ┗ ئۇ ў ‘

```
Ruijie(config)# tacacs-server host 192.168.12.1
Ruijie(config)# tacacs-server host 2001::1
```

Ъ ъ	
aaa authentication	HЖ AAA
tacacs-server key	HЖ TACACS+ ┗ ئۇ ъ
tacacs-server timeout	HЖ TACACS+ ┗ ئۇ ط ئۇ

Л

Ъ ъ	Л
-	-

4.1.5 tacacs-server key

Ъ ъ TACACS+ Â

tacacs-server key [*0* | *7*] *string*

no tacacs-server key

string	ъ
0	*7*	ъ ╗ خش 0 ╗ ˘ 7 ╗ Â

ъ Â

Ъ ъ Â

ʖ TACACS+ ئۇ Âй TACACS+
ئۇ ˘ ف TACACS+ ئۇ Э Ж ˚ ʖ Â
й ئۇ a˚ ˘ host ʖ key ˘
Л key ئۇ keyÂ

Ю Ж TACACS+ ئۇ ʖ й aaa

```
Ruijie(config)#tacacs-server key aaa
```

ʖ	
tacacs-server host	Ж TACACS+ ئۇ ў
tacacs-server timeout	Ж TACACS+ ئۇ

-sb l tr↔out Ж M

л	
o	a

-	-

4.2.2 show tacacs

n TACACS+ ┗ ﾂﾗ Â

show tacacs

-	-

Ъ ҳ Â

Ъ ҳ n TACACS+ ┗ ﾂﾗ Â

```
Ruijie# show tacacs
Tacacs+ Server : 172.19.192.80/49
Socket Opens: 0
Socket Closes: 0
Total Packets Sent: 0
Total Packets Recv: 0
Reference Count: 0
```

5 802.1X

5.1

5.1.1 dot1x auth-address-table

Ъ ҳ 802.1X كـ هـ Â Ъ ҳ **no** /ا كـ هـ Â

dot1x auth-address-table address *mac-addr* **interface** *interface*

no dot1x auth-address-table address *mac-addr* **interface** *interface*

ò Ô

mac-addr	/ا كـ هـ Â
interface	ا Â

ò Ô /ا كـ هـ Â

ò Ъ ҳ Ô Â

ò Ô فخ كـ هـ كـ هـ 802.1X Â **show dot1x auth-address table** Ъ ҳ كـ هـ Â

ò Ô Ю فخ Э ╗ كـ هـ Â

```
Ruijie# configure terminal
Ruijie(config)# dot1x auth-address-table address 00d0f8000000 interf800  b  —          Ж
```

ὃ Ъ ҳ Ô	Ъ ҳ	

ὸ Ъ ҳ Ô

ὸ Ô Л Л Ъ **show dot1x** Ъ ҳ 802.1x Â

ὸ Ô Ю 802.1x ‘

```
Ruijie# configure terminal
Ruijie(config)# dot1x auth-mode chap
Ruijie(config)# end
Ruijie#
```

ὸ Ъ ҳ Ô

Ъ ҳ	
show dot1x	802.1x Â

ὸ Л Ô -

5.1.6 dot1x auto-req

802.1X ў ╖ ˘ Ъ ҳ **dot1x auto-req** Â Ъ ҳ **no** Л ў ╖ Â

dot1x auto-req

no dot1x auto-req

ὸ Ô

-	-

ὸ Ô ў í

ὸ Ъ ҳ Ô Â

ὸ Ô ў 802.1x ˘ Л Ъ **show dot1x auto-req** Ъ ҳ ╖ Â

ὸ Ô Ю ў 802.1x ‘

```
Ruijie# configure terminal
Ruijie(config)# dot1x auto-req
Ruijie(config)# end
Ruijie# show dot1x auto-req
Ruijie(config)# dot1x auto-req
Auto-Req: Enabled
User-Detect : Enabled
Packet-Num  : 0
Req-Interval: 30 Second
```

ὸ Ъ ҳ Ô

Ъ ҳ	

show dot1x auto-req	ў Â

ὃ Λ Ô -

5.1.7 dot1x auto-req packet-num

ў ˘ **no** ѝ Â

dot1x auto-req packet-num *num*

no dot1x auto-req packet-num

ὃ Ô

num	ў Â

ὃ Ô num = 0; ¨ Â

ὃ Ъ ҳ Ô Â

ὃ Ô ў ˘ Λ Љ **show dot1x auto-req** Ъ ҳ ╖ Â

ὃ Ô Ю ў 802.1x

```
Ruijie# configure terminal
Ruijie(config)# dot1x auto-req packet-num 0
Ruijie(config)# end
Ruijie# show dot1x auto-req
Auto-Req: Enabled
User-Detect : Enabled
Packet-Num  : 0
Req-Interval: 30 Second
```

ὃ Ъ ҳ Ô

Ъ ҳ	
show dot1x auto-req	ў

ὃ Λ

ð Ъ ҳ Ô Â

ð Ô ў ˘ Л Љ **show dot1x auto-req** Ъ ҳ ╖ Â

ð Ô Ю 802.1x й 60s ‘

```
Ruijie# configure terminal
Ruijie(config)# dot1x auto-req req-interval 60
Ruijie(config)# end
Ruijie# show dot1x auto-req
Auto-Req: Enabled
User-Detect : Enabled
Packet-Num  : 0
Req-Interval: 60 Second
```

ð Ъ ҳ Ô

Ъ ҳ	
show dot1x auto-req	ў Â

ð Л Ô -

5.1.9 dot1x auto-req user-detect

Э ж˙ ˘ a Ѧ ў ˘ **no** й Â

dot1x auto-req user-detect

no dot1x auto-req user-detect

ð Ô

-	-

ð Ô

ð Ъ ҳ Ô Â

ð Ô Э ж˙ ˘ a Ѧ ў ˘ Л Љ **show dot1x auto-req** Ъ ҳ ╖ Â

ð Ô Ю Э Э ł˘ ÿ ў ‘

```
Ruijie# configure terminal
Ruijie(config)# dot1x auto-req user-detect
Ruijie(config)# end
Ruijie# show dot1x auto-req
Auto-Req: Enabled
User-Detect : Enabled
Packet-Num  : 0
```

```
Req-Interval: 60 Second
```

ŏ Ъ ҙ Ô

Ъ ҙ	
show dot1x auto-req	ў Â

ŏ ⁄ Ô -

5.1.10 dot1x client-probe enable

ﻑ ╗

dot1x client-probe enable

no dot1x client-probe enable

b4c–

ŏ Ô Gh™ ñDpœD •¾vU B€d @É •U Q W S %(•VnÀ €0 ñ"– €0 ñ }v‰\ß |AxA•,XG

show dot1x	dot1x Â

ъ л Ô -

5.1.11 dot1x critical

RADIUS ы ъ ы з 802.1x è ы
Ю ы Â Ю и a л ы л Л ъ ф
Э í ы ^ Inaccessible Authentication Bypass IAB ы Â
no л Л ъ Ъ ъ Â
dot1x critical
no dot1x critical

ъ Ô

-	-

I Ö 802.0 ў02 й U Ы

5.1.12

ᴸ ᵑᵘ ᵕ ɜ ╗ VLAN Â ╖ ᵕ ᴸ ᵑᵘ
ᵕ a VLAN Â

ò Ô
```
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Ruijie(config)# interface fa 0/10
Ruijie(config-if)# dot1x port-control auto
Ruijie(config-if)# dot1x critical vlan 100
Ruijie(config-if)# end
```

ò Ъ ҳ Ô

Ъ ҳ	
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ò ʌ Ô -

5.1.14 dot1x default

802.1x ᵎ Â

dot1x default

ò Ô

-	-

ò Ô -

ò Ъ ҳ Ô Â

ò Ô ʌ Л **show dot1x** Ъ ҳ 802.1x Â

ò Ô Ю 802.1x
```
Ruijie# configure terminal
Ruijie(config)# dot1x default
Ruijie(config)# end
Ruijie# end
```

ò Ъ ҳ Ô

Ъ ҳ	?Ъ ҳ

no dot1x dynamic-vlan enable

ъ Ô

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ъ Ô й

ъ Ъ ъ Ô

ъ Ô Л Љ **show dot1x dynamic-vlan** Ъ ъ 802.1x Â

ъ Ô Ю 802.1x vlan

```
Ruijie# configure terminal
Ruijie(config)# dot1x dynamic-vlan enable
Ruijie(config)# end
Ruijie#
```

ъ Ъ ъ Ô

Ъ ъ	
show dot1x	802.1x Â

ъ Л Ô -

5.1.16 dot1x eapol-tag

EAPOL TAG ╗ Â

dot1x eapol-tag

no dot1x eapol-tag

ъ Ô

-	-

ъ Ô й

ъ Ъ ъ Ô Â

ъ Ô Л Љ **show dot1x** Ъ ъ 802.1x

ъ Ô Ю 802.1X tag

```
Ruijie# configure terminal
Ruijie(config)# dot1x eapol-tag
Ruijie(config)# end
Ruijie#
```

ъ Ъ ъ Ô

Ъ ъ	
show dot1x	802.1x Â

ъ л Ô -

5.1.17 dot1x guest-vlan

guest vlan Â Ъ ъ **no** л Љ Â

dot1x dynamic-vlan *vid*

no dot1x guest-vlan

ъ Ô

vid	<1 - 4094>

ъ Ô й

ъ Ъ ъ Ô Ю

ъ Ô guest vlan ╖ **dot1x dynamic-vlan enable** Ъ ъ ‡ guest vlan a Â

guest vlan ╖ a è ╖ vlan Â

л Љ **show running-config** Ъ ъ 802.1x Â

ъ Ô Ю 802.1x guest vlan

```
Ruijie# configure terminal
Ruijie(config)# dot1x guest-vlan 10
Ruijie(config)# end
Ruijie#
```

ъ Ъ ъ Ô

Ъ ъ	
show running-config	802.1x Â

ъ л Ô -

5.1.18 dot1x mac-auth-bypass

MAC Â

dot1x mac-auth-bypass

no dot1x mac-auth-bypass

ъ Ô

-	-

5.1.20 dot1x mac-auth-bypass timeout-activity

802.1x MAC فذ هه كم Â

dot1x mac-auth-bypass timeout-activity *value*

no dot1x mac-auth-bypass timeout-activity

ъ Ô ! Ú *value* تز 1-65535

```
Ruijie(config)# interface fa 0/1
Ruijie(config-if)# dot1x mac-auth-bypass timeout-activity 3600

Ruijie#write
```

ъ Ъ ҳ Ô

show dot1x port-control interface	802.1x

ъ Л Ô -

802.1x MAC Ó

dot1x mac-auth-bypass violation Ԍ **no dot1x mac-auth-bypass violation**

ъ Ô

-	-

ъ Ô

ъ Ъ ҳ Ô

ъ Ô Л Ш **show run** ҂ Ҕ **M Ꭺ ҳ ʻ ʻ 802.1x**

ð Ô Ю 802.1x MAC

```
Ruijie# configure terminal
Ruijie(config)# interface fa 0/1
Ruijie(config-if)# dot1x mac-auth-bypass violation
```

ъ Ъ ъ Ô

Ъ ъ	
show dot1x	802.1x Â

ъ л Ô -

5.1.25 dot1x multi-mab quiet-period

Ъ ъ mab ł ˆ ˜ Â Ъ ъ **no** й Â

dot1x multi-mab quiet-period *seconds*

no dot1x multi-mab quiet-period

ъ Ô

seconds	mab ł Â نر 0 65535 Â Æ s

ъ Ô 30 Â

ŏ Ђ ҳ Ô

ŏ Ô Л Љ **show dot1x** Ђ ҳ 802.1x Â

ŏ Ô Ю 802.1x б ‘

ð Ô 1' Ю 802.1x б '

```
Ruijie(config)# interface g 0/1
Ruijie(config-if)# dot1x port-control auto
Ruijie(config-if)# dot1x port-control-mode port-based
Ruijie(config-if)# end
Ruijie#
```

2' Ю 802.1x '

```
Ruijie(config)# interface g 0/1
Ruijie(config-if)# dot1x port-control auto
Ruijie(config-if)# dot1x port-control-mode port-based single-host
Ruijie(config-if)# end
Ruijie#
```

ð Ъ ҳ Ô

Ъ ҳ	
show dot1x port-control	802.1x Â
Show running-config	Â

ð л Ô -

5.1.28 dot1x private-supplicant-only

ƶф ˘ ˘ **no** Â

dot1x private-supplicant-only

no dot1x private-supplicant-only

ð Ô

-	-

ð Ô a

ð Ъ ҳ Ô Â

ð Ô л Љ **show dot1x private-supplicant-only** Ъ ҳ 802.1x Â

ð Ô Ю '

```
Ruijie# configure t
Ruijie(config)# dot1x private-supplicant-only
Ruijie(config)# end
Ruijie#
```

ð Ъ ҳ Ô

Ъ ҳ	
show dot1x private-supplicant-only	Â

ъ Л Ô -

5.1.29 dot1x probe-timer

.ئۆ

dot1x probe-timer{**interval** | **alive**}*interval*

no dot1x probe-timer

ъ Ô

no	
interval	hello
alive	ف
interval	ئۆ

ъ Ô Hello й 20 ’

ف й 250 Â

ъ Ъ ҳ Ô Â

ъ Ô ف ئۆ˘ Л Љ **show dot1x** Ъ ҳ 802.1x Â

ъ Ô hello й 30 , ف й 120 ‘

```
Ruijie# configure terminal
Ruijie(config)# dot1x probe-timer interval 30
Ruijie(config)# dot1x probe-timer alive 120
Ruijie(config)# end
Ruijie# show dot1x probe-timer
Hello Interval: 30 Seconds
Hello Alive: 120 Seconds
```

ъ Ъ ҳ Ô

Ъ ҳ	
Show dot1x probe-timer	ف ئۆ Â

ъ Л Ô -

5.1.30 dot1x pseudo source-mac

mac й 802.1x mac ╖ ˘ no Ъ ҳ˘ ‡

mac ك ھ й 802.1x mac Â

dot1x pseudo source-mac

no dot1x pseudo source-mac

ъ Ô

-	-

ὃ Ô ╖ ѝ

ὃ Ъ ҳ Ô Â

ὃ Ô 001a.a917.ffff ѝ 802.1x mac˘ ʌ Л Ъ **show running-config** Ъ ҳ 802.1x Â

ὃ Ô mac ѝ 802.1x mac :

```
Ruijie# configure terminal
Ruijie(config)# no dot1x pseudo source-mac
Ruijie(config)# end
Ruijie#
```

ὃ Ъ ҳ Ô

Ъ ҳ	
-	-

ὃ ʌ Ô -

5.1.31 dot1x re-authentication

Ъ ҳ Â Ъ ҳ **no** Â

dot1x re-authentication

no dot1x re-authentication

ὃ Ô

-	-

ὃ Ô a Â

ὃ Ъ ҳ Ô Â

ὃ Ô Ъ ҳ˘ ‡ ɨ˘ ɨ ÂʌЛЪ **show dot1x** Ъ ҳ 802.1x Â

ὃ Ô Ю ╖ ˙

```
Ruijie# configure terminal
Ruijie(config)# dot1x re-authentication
Ruijie(config)# end
Ruijie# show dot1x
802.1X Status:        Enabled
Authentication Mode:  EAP-MD5
```

```
Authed User Number:   0
```

```
Re-authen Period:      1000 sec
Quiet Timer Period:    1000 sec
Tx Timer Period:       10 sec
Supplicant Timeout:    10 sec
Server Timeout:        10 sec
Re-authen Max:         5 times
Maximum Request:       3 times
Filter Non-RG Supp:    Disabled
Client Oline Probe:    Disabled
Eapol Tag Enable:      Disabled
Authorization Mode:    Group Server
```

ò Ъ ъ Ô

Ъ ъ	
show dot1x	802.1x Â

ò Л Ô -

5.1.33 dot1x stationarity enable

802.1x فج لجي Ю Ю Л Лъ فج ˘ Ю й

a ÿ 802.1X è ˘ Л Лъ ЛъЮЪ ъ Â

dot1x stationarity enable

no dot1x stationarity enable

ò Ô

-	-

ò Ô й Л Лъ فج Â

ò Ъ ъ Ô Â

ò Ô فج Ъ ъ˘ ‡ Â

ò Ô Ю 802.1x б ‘

```
Ruijie# configure terminal
Ruijie(config)# dot1x stationarity enable
Ruijie(config)# end
Ruijie#
```

ò Ъ ъ Ô

Ъ ъ	
-	-

ò Л Ô -

5.1.34 dot1x timeout quiet-period

Ъ ҳ ˆ ҳ ˜ ѣ ˆ ˜ Â

Ъ ҳ **no** й Â

dot1x timeout quiet-period *seconds*

5.1.35 dot1x timeout re-authperiod

5.1.36 dot1x timeout server-timeout

Ъ ъ p ┗ئۇ Â Ъ ъ **no** ى Â

dot1x timeout server-timeout *seconds*

no dot1x timeout server-timeout

ٱ Ô

seconds	p ┗ئۇ ˇ نز 0 65535 Â

ٱ Ô 5 Â

ٱ Ъ ъ Ô Â

ٱ Ô ٨ Л Ъ **show dot1x** Ъ ъ 802.1x Â

ٱ Ô Ю ┗ئۇ ى 10s

```
Ruijie# configure terminal
Ruijie(config)# dot1x timeout server-timeout 10
Ruijie(config)# end
Ruijie# show dot1x
802.1X Status:        Enabled
Authentication Mode:  EAP-MD5
Authed User Number:   0
Re-authen Enabled:    Disabled
Re-authen Period:     1000 sec
Quiet Timer Period:   1000 sec
Tx Timer Period:      3 sec
Supplicant Timeout:   3 sec
Server Timeout:       10 sec
Re-authen Max:        3 times
Maximum Request:      3 times
Filter Non-RG Supp:   Disabled
Client Oline Probe:   Disabled
Eapol Tag Enable:     Disabled
Authorization Mode:   Group Server
```

ٱ Ъ ъ Ô

Ъ ъ	
show dot1x	802.1x

ٱ ٨ Ô -

5.1.37 dot1x timeout supp-timeout

Ъ ъ p Â Ъ ъ **no** ى Â

dot1x timeout supp-timeout *seconds*

no dot1x timeout supp-timeout

seconds	0 65535 Â

ð Ô 3 Â 0 4Ì! |4 Q Ð 0 b

ŏ Ô !

ὸ Ô

-	-

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ὸ Ъ ҙ Ô Â

ὸ Ô

ὸ Ô Ю

```
Ruijie# show dot1x
802.1X Status:          Enabled
Authentication Mode:    EAP-MD5
Authed User Number:     0
Re-authen Enabled:      Disabled
Re-authen Period:       3600 sec
Quiet Timer Period:     10 sec
Tx Timer Period:        3 sec
Supplicant Timeout:     3 sec
Server Timeout:         5 sec
Re-authen Max:          3 times
Maximum Request:        3 times
Filter Non-RG Supp:     Disabled
Client Oline Probe:     Disabled
Eapol Tag Enable:       Disabled
Authorization Mode:     Group Server
MAC Move Permit'         Enabled
```

ὸ Ъ ҙ Ô Ъ ҙ

5.2.2 show dot1x auth-address-table

Ъ ҳ 802.1X ѕ ѫ Â

show dot1x auth-address-table[*addressmac-addr*][*interface interface*]

ὂ Ô

mac-addr	∧ ѕ ѫ
interface	∧

ὂ Ô -

ὂ Ъ ҳ Ô Â

ὂ Ô -

ὂ Ô Ю

```
Ruijie# show dot1x auth-address-table
interface:g3/1
----------------------------------
mac addr: 00D0.F800.0001
Ruijie#
```

ὂ Ъ ҳ Ô

Ъ ҳ	
dot1x auth-mode	802.1x Â
dot1x max-req	Â
dot1x port-control auto	╗ Â
dot1x reauth-max	
dot1x re-authentication	Â
dot1x timeout quiet-period	ł Â
dot1x timeout re-authperiod	Â
dot1x timeout server-timeout	n ┗**dot1x¦! s! t-period**è^ **M**Ʊ ¥ **ᑭ**

ð Ô -

ð Ъ ҳ Ô

ð Ô -

ð Ô Ю ‘

```
Ruijie# show dot1x auto-req
Auto-Req: Disabled
User-Detect : Enabled
Packet-Num  : 0
Req-Interval: 30 Seconds
```

ð Ъ ҳ Ô

Ъ ҳ	
dot1x auth-mode	802.1x Â
dot1x max-req	Â
dot1x port-control auto	╕ Â
dot1x reauth-max	
dot1x re-authentication	Â
dot1x timeout quiet-period	ɨ Â
dot1x timeout re-authperiod	Â
dot1x timeout server-timeout	n ﻉﺅ Â
dot1x timeout supp-timeout	n Â
dot1x timeout tx-period	˘ ¨ Ƣ Â

ð ⁄ Ô -

5.2.4 show dot1x max-req

Â

show dot1x max-req

ð Ô

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ð Ô -

ð Ъ ҳ Ô

ð Ô -

ð Ô Ю ‘

```
Ruijie# show dot1x max-req
```

```
max-req: 2 times
Ruijie#
```

ò Ъ ҳ Ô

Ъ ҳ	
dot1x auth-mode	802.1x

dot1x re-authentication	Â
dot1x timeout quiet-period	ɨ Â
dot1x timeout re-authperiod	Â
dot1x timeout server-timeout	p ﻧﺆ Â
dot1x timeout supp-timeout	p Â
dot1x timeout tx-period	˘ ¨ Ƣ Â

â Ð

ὸ ⁄ı Ô -

5.2.6 show dot1x private-supplicant-only

upplic **sʃ=ę⁄ı** lj **»- t1x xǫvam $** **M. M**

5.2.7 show dot1x probe-timer

ﻧﯚ ﻓﺬ

show dot1x probe-timer

ò Ô

dot1x port-control auto ╗ Â

dot1x timeout supp-timeout	p Â
dot1x timeout tx-period	˘ ¨ Ƣ Â

ὸ ʌ Ô -

5.2.11 show dot1x timeout

Ъ ҳ 802.1X

show dot1x timeout quiet-period

show dot1x timeout re-authperiod

show dot1x timeout server-timeout

show dot1x timeout supp-timeout

show dot1x timeout tx-period

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ὸ Ъ ҳ Ô

ὸ Ô

ὸ Ô Ю

```
Ruijie# show dot1x timeout quiet-period
quiet-period: 60 sec
Ruijie#
```

ὸ Ъ ҳ Ô

Ъ ҳ		ὐ ' '

5.2.12

dot1x timeout re-authperiod	Â
dot1x timeout server-timeout	n ﻁ ﻧﻮ Â
dot1x timeout supp-timeout	n Â
dot1x timeout tx-period	˘ ¨ Ƣ Â

ὸ ∕ Ô -

6 Web

6.1

6.1.1 http redirect

HTTP IP кс нн˘ IP кс нн˘ ≠ ч Portal IP кс нн Â Ъ ч **http redirect** Â Ъ ч **no** HTTP IP кс нн Â

http redirect *ip-address*

no http redirect

ip-address	HTTP IPv4 кс нн Â

HTTP IP кс нн Â

Ъ ч Â

1. ч Web Portal ъ кс нн Ъ ч ˘ a ү ч Web Â
2. portal ╗ Ю homepage ˘ ‡ Â ╗ ˘ ‡ homepage л ˘ a Ю portal ъ ip кс нн й кс url

1˙ HTTP IPv4 кс нн й 172.16.0.1Â

```
Ruijie(config)# http redirect 172.16.0.1
```

Ъ ч	
show http redirect	HTTP Â
http redirect homepage	ў кс нн Â

л Â

л	
10.2(5)	Ъ ч Â

6.1.2 http redirect direct-site

no

http redirect direct-site *ipv6-address* | *{ip-address* [*ip-mask*] [**arp**]}
no http redirect direct-site *ipv6-address* | *{ip-address* [*ip-mask*]}

ip-address	IP
ipv6-address	IPv6
ip-mask	IP
arp	ARP CHECK ARP **arp**

Web

100

1 IP 172.16.0.1

```
Ruijie(config)# http redirect direct-site
```

url-string	Portal “http://” “https://” 255

Â

Â

Web Â

Â

1 Â

```
http://www.ruijie-eportal.net:8080/loginÂ
Ruijie(config)#
```

http redirect homepage *http://www.ruijie-eportal.net:8080/login*

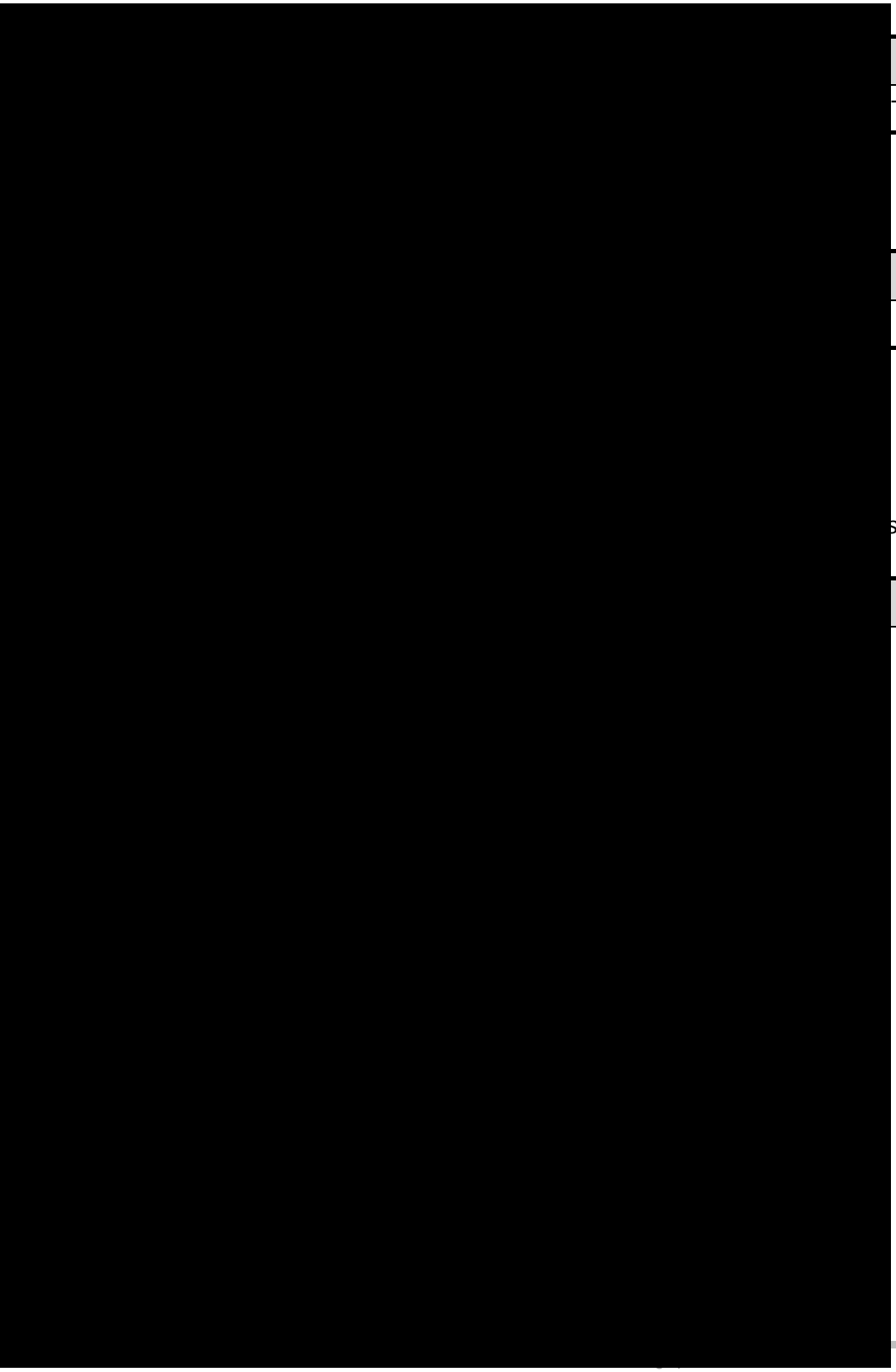
show http redirect

1' л й 8080 HTTP Web Â

```
Ruijie(config)# http redirect port 8080
```

2' a л й 80 HTTP Web Â

```
Ruijie(config)# no http redirect port 80
```



TTP Â

Ю

ssion-num]

HTTP ˘ ٨ ىز

HTTP ˘ 1- Ң ىز

Ъ ъ

Ъ ъ	
show http redirect	HTTP Â

Л Â

Ъ ъ

Л	
10.2(5)	Ъ ъ
10.4(1T10)	ث ˘ اجي Â

6.1.6 http redirect timeout

Â Л Л Ъ Ъ ъ **no**

ѝ 3 Â

http redirect timeout *seconds*

no http redirect timeout

seconds	Â æ ѝ ˘ Л ѧ ѝ [1˘ 10] Â

ѝ 3 Â

Ъ ъ Â

Â ѧ ѝ Ь ╖ ѣ˘ HTTP
GET/HEAD ˘ ѣ تي HTTP ѣ Â Л Л Ъ
a GET/HEAD ˘ . TCP Â

1˙ ѝ 4Â

```
Ruijie(config)# http redirect timeout 4
```

6.1.7 portal-server

… γ Ϟ Web Portal ┗ ┓ ˘ ┗ ┓ ┗ ┓ ¨ ˘ IP ﻩ ﻛ ˘ URL ┗ ┓ UDP ő Â Portal ┗ ┓ ˘ ∧ Ъ Ϟ **no** Â

portal-server eportalv2 [type v2] ip {*ip-address* } [**port** *port-num*] [**url** *url-string*]

{no | default} portal-server eportalv2

ip-address	┗ ┓ IPv4 ﻩ ﻛ Â
url-string	^ ∧ ~ URL˘ ∧ ﻧ ﻳ [10, 255] Â
port-num	^ ∧ ~ ┗ ┓ UDP ő Â ∧ ﻧ ﻳ [1, 65535] Â
pagename	¨

˘ Â γ Ϟ ˘ Ю URL è ┗ ┓ IP HTTP ┗ ˘ ┗ ┓ IP ﻳ 172.20.1.1˘ ‡ è URL ﻳ http://172.20.1.1/ Â

γ Ϟ ˘ Ю ┗ ┓ UDP ő ﻳ 50100 Â

Ъ Ϟ Â

╖ γ Ϟ portal Web ╖ ˘ γ Ϟ Portal ┗ ┓ Â

a no Ъ Ϟ Â

1˙ í γ Ϟ Web ╖ ˘ … γ Ϟ Portal ┗ ┓ ˘ è ˘ ┗ ┓ IPv4 ﻩ ﻛ ﻳ 172.20.1.1˘ URL ﻳ http://172.20.1.1:7080/login.php Â

```
Ruijie# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Ruijie(config)#portal-server eportalv2 ip 172.20.1.1 url
http://172.20.1.1:7080/login.php
```

Ъ Ϟ	
show web-auth portal	γ Ϟ portal Portal ┗ ┓ Â

∧ Â

Ъ ҳ

ʌ	
10.4(1T10)	Ъ ҳ Â

6.1.8 web-auth accounting v2

ɣ ҳ Web ˘ Â ʌ Л Ъ Ъ ҳ

no è Â

web-auth accounting v2 *list-name*

no web-auth accounting v2

list-name	AAA network ɯɨ ˘ é AAA Â

˙ ѝ **default**

Ъ ҳ Â

🕮 ˚ í ˘ ʌ … ˙ a˚ ƚ Â

ƒ ƒ é ˘ ƒ AAA ˘ ‡ ɯɨ Â

1˙ AAA network ɯɨ comm_acct˝ RADIUS ᒪ ꞉ ^ ˙ ѝ radius˜ ˘ ɨ ɣ ҳ Web Â

```
Ruijie# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Ruijie(config)# aaa accounting network comm_acct start-stop group
radius
Ruijie(config)# web-auth accounting v2 comm_acct
Ruijie(config)# exit
```

Ъ ҳ	
aaa accounting network	AAA network ɯɨ Â

ग Â

Ъ ३

ग	
10.4(1T10)	Ъ ३ Â

Ъ ҳ	ʌ	
	10.4(1T10)	Ъ ҳ Â

6.1.10 web-auth authentication v2

ɣ ҳ Web ˘ Ъ ҳ Â ʌ Ћ Ъ ҳ

no è Â

web-auth authentication v2 *list-name*

no web-auth authentication v2

list-name	AAA Web ښ ˘ é AAA Â

Ъ ъ

ѧ	
10.4(1T10)	Ъ ъ Â

6.1.11 web-auth direct-host

IP ѫ Â ѧ Л Ъ Ъ ъ **no** IP Â

web-auth direct-host *ip-address* [*ip-mask*] [**arp**]

no web-auth direct-host *ip-address*

ip-address	IP ѕ ѭ Â
ip-mask	^ ѧ ~ IP ѕ ѭ Â
arp	^ ѧ ~ Í ARP CHECK ╖ ˘ ж IP ѫ ARP ˘ **arp** Â

IP˝ IP Web ˘ Â

Ъ ъ Â

й IP˝ ж IP Web Л Ъ ѧ Â
100 IP Â

1˙ IP ѕ ѭ 172.16.0.1 й IP Â

```
Ruijie(config)# web-auth direct-host 172.16.0.1
```

no web-auth offline-detect flow [**idle-timeout**] [**threshold**]

minutes	Q Â æ ù† ˇ Л нт ù [1ˇ 65535] † Â Л ˇ 15† Â
bytes	Â æ ù ˇ Л нт ù [Ơ 4294967294] Â Л ˇ 0 Â

Ю Ơ ЫЭ ╗ ˇ 15† 0 Â

Ъ ъ Â

Â

1ˇ í ╗ ˇ Q ù 3† ˇ ù 1024 Â

```
Ruijie(config)# web-auth offline-detect flow idle-timeout 3
threshold 1024
```

Ъ ъ

Ъ ъ	
show web-auth user	ф Â

Л

Â

Ъ ъ

Л	
10.2(5)	Ъ ъ
10.4(1T10)	╗ ˇ ╗ Â
10.4(1T13)	í
10.4(2b12)	

6.1.13 web-auth port-control

ф Э í Web Â Л Лъ Ъ ъ **no** ф Э Web Â

web-auth port-control [**i** ‘

ip-only-mode Ю Web Лъ ѣ ˇ IP à
MAC p Â Ю Ь
ˇ ѝ a ˚

й Y ҳ Web Portal ╖ Â

Ъ ҳ Â

1` б ┗ ﻭ ѝ *ruijie* Â

```
Ruijie(config)# web-auth portal key ruijie
```

Ъ ъ	
Ъ ъ	
http redirect	

Ъ ч	
portal-server	… ү ч Web Portal ٹؤ ـا Â

л Â

Ъ ч	л	
	10.4(1T10)	Ъ ч Â

6.1.17 web-auth update-interval

ڣڅ Â л Ль Ъ ч **no** ڣڅ
ѝй Â

web-auth update-interval *seconds*
no web-auth update-interval

seconds	˘ Æ ˘ ٨ ىز 30-3600 Â

ڣڅ ѝй 180 Â

Ъ ч Â

Â

1˙ ڣڅ ѝй 120 Â

```
Ruijie(config)# web-auth update-interval 120
```

Ъ ч	

л

Ъ ч	л	
	10.2(5)	Ъ ч

6.2

- clear web-auth portal-type v2 statistics
- clear web-auth user
- show http redirect
- show web-auth portal
- show web-auth direct-host
- show web-auth control
- show web-auth user

6.2.1 clear web-auth portal statistics

y ³ p portal Web Â

clear web-auth portal statistics

Â	Â

Â

clear web-auth user by {**ip** *ip-address* | **mac** *mac-address* | **name** *name-string* | **id** *id*}

ip	IP ف Ю Â
ip-address	IPv4 ه ك Â
mac	mac ف Ю Â
mac-address	MAC ه ك Â
name	¨ ف Ю Â
name-string	¨ Â
id	AAA id

Â	

Â

Ъ ҳ Â

Ъ ҳ˘ HTTP ь ӯ à à à IP Â

1˙ HTTP Â

```
Ruijie# show http redirect
HTTP redirection settings:
  server:         172.20.1.1
  port:           80  8000
  homepage:       http://172.20.1.1:8888/ePortal/index.jsp
  session-limit: 10
  timeout:        5

Direct sites:
  Address           MASK              ARP Binding
  ----------------- ----------------- -----------
  61.233.3.215     255.255.255.255    On
  61.233.3.220     255.255.255.255    Off
  192.168.5.140    255.255.255.255    Off
  218.30.66.101    255.255.0.0        Off
  218.30.66.101    255.255.255.255    Off

Direct arp addresses:
  Address           MASK
  ----------------- -----------------

Direct hosts:
  Address           Mask              Port        ARP Binding
  ----------------- ----------------- ----------- ------------
  192.168.1.1       255.255.255.255   N/A         On
```

6.2.4 show web-auth portal

γ ३ portal Web n Â

show web-auth portal [v2 [parameters | **aaa** | **statistics** | **by-name eportalv2**]

V2 Portal User Statistics	ү ч Web Â
Current Online User Count	ф Â
Max. Online User Count	ф Â
Online User Limit	ф Э Â
V2 Portal Communication Statistics	ь ү ч Portal Â
Challenge Req Count	Challenge Â
Challenge Rsp Count	Challenge ф Â
Challenge Passed Count	Challenge ╖ Â
Challenge Failure Count	Challenge Â
Challenge Rsp Send Succ Count	╖ Challenge ф Â
Auth Req Count	Â
Auth Rsp Count	ф Â
Auth Passed Count	╖ Â
Auth Failure Count	Â
Auth Rsp Send Succ Count	╖ ф Â

Ъ ч

Ъ ч	
clear web-auth portal statistics	ү ч Web Â

Л Â

Ъ ч

Л	
10.4(1T10)	Ъ ч Â

6.2.5 show web-auth direct-host

web ^ ~ Â

show web-auth direct-host

Â	

Â

Ъ ҳ Â

Â

1˙ Â

```
Ruijie# show web-auth direct-host
Direct hosts:
  Address          Mask             Port        ARP Binding
  ---------------- ---------------- ----------- ------------
  192.168.0.1      255.255.255.255  N/A         On
  192.168.4.11     255.255.255.255  N/A         On
```

online-only	ˆ /ı ˜ فخ Â
v2	γ ҳ portal Web Â
intra	portal Web Â
start-from	ˆ /ı ˜ ÿ *index* Â
index	ˆ /ı ˜ ÿ Â
display-amount	ˆ /ı ˜ Â
statistics	Web Â
ip-address	IP Â

Â

Ъ ҳ Â

Â

1˙ Web Â

```
Ruijie# show web-auth user all
Statistics:
Type           Online  Total   Accumulation
-------------- ------- ------- ------------
V1 Portal      2       4       10
V2 Portal      0       1       39
-------------- ------- ------- ------------
Total          2       5       49

V1 Portal Authentication Users
-------------------------------------------------------------------
Index Address       Online Time Limit    Time Used     Status
----- ------------- ------ ------------- ------------- ---------
1     192.168.0.11  On     0d 01:00:00   0d 00:15:10   Active
2     192.168.0.13  On     0d 00:00:00   0d 00:00:59   Active
3     192.168.0.25  Off    0d 00:00:00   0d 00:00:00   Create
4     192.168.0.46  Off    0d 01:00:00   0d 01:00:00   Destroy
-------------------------------------------------------------------

V2 Portal Authentication Users
-------------------------------------------------------------------
```

Time Limit	/l ˘ Â ˘ ”0d 00:00:00” a Â
Time Used	˘ Â
Status	é Â 1. Web é Ю a) Active Â b) Create • … à Â c) Destroy • à Â 2. ɣ Web é Ю a) Initialized ˘ Â b) Chap Portal CHAP Â c) Authenticating Â d) WaitAffAckAuth ˘ ɣ Portal Portal ط Â e) Authenticated ˘ Â f) WaitAckLogout ў Ю ˘ Portal Portal ط Â g) StopAcct Â h) WaitDelete ˘ HTTP ˘ Â
Time Start	à Э Â
AAA Id	ɣ Web AAA Â
Username	ɣ Web Â

Ъ

Ъ	
Â	Â

/l

Â

Ъ

/l	
10.2(5)	Ъ Â

	10.4(1T10)	Web ˘ Æ Â 0 Â

7 SSH

7.1 SSH

7.1.1 crypto key generate

Ь ёЎ Ъ ў ЮЎ Ъ ђ'

crypto key generate {**rsa | dsa**}

rsa	RSA
dsa	DSA

Ю SSH Server Ъ Â

Ъ ђ

SSH Server Ь ў Ъ ђ SSH Ь ёЎ Ъ Â˚
enable service ssh-server Ъ ђў SSH Server ╖ ÂSSH 1 RSA ' SSH 2 RSA DSA Â ѕЎ ў RSA ў ‡ SSH1 б SSH2 Л Лъ ' DSA ў ‡ SSH2 Л Лъ Â
ў DSA ц ћ ђў

show ip ssh	SSH Server Â
crypto key zeroize {**rsa	dsa**}	DSA б RSA ˘ SSH Server ╖ Â

Ъ ч

л	
-	-

7.1.2 crypto key zeroize

SSH ┺ ъ Ώ ˘ ф Ю Ъ ч'

crypto key zeroize {**rsa** | **dsa**}

rsa	RSA
dsa	DSA

Ъ ч

Ъ ч ┺ ъ Ώ Â ŧ˘ SSH Server ѝ ѝ DISABLE Â SSH Server˘ **no enable service ssh-server** Ъ ч Â

```
Ruijie# configure terminal
Ruijie(config)# crypto key zeroize rsa
```

Ъ ч

Ъ ч	
show ip ssh	SSH Server Â
crypto key generate {**rsa|dsa**}	DSA б RSA Â

л RGOS10.1 Лъ Э

7.1.3 ip scp server enable

ֆ֝ Э SCP ┗ ╖ ˇ ∧ Л֏ Э Ю ˇ Л֏
ѫ Э ˇ ˚ Л֏ ˇ é n Â

ip scp server enable

no ip scp server enable

[redacted]	-
	-

a í SCP ┗ ╖

֏ ֈ

-

í scp ╖ ‘

```
Ruijie# configure terminal
Ruijie(config)# ip scp server enable
```

Ю й 3 Â ђ˘ **no ip ssh authentication-retries** Ђ ђ ≠ Л Љ й Â

Ђ ђ

Ђ ђ SSH Server Â SSH Server ˘ Ў ╖˘ ‡ й Â **show ip ssh** Ђ ђ SSH Server Â

й 2ґ

```
Ruijie# configure terminal
Ruijie(config)# ip ssh ssh authentication-retries 2
```

Ђ ђ

Ђ ђ	
show ip ssh	SSH Server Â

Л RGOS10.1 Љ Э

Ђ ђ

Л	
-	-

7.1.5 ip ssh peer

Ђ ђ Ѓ р ¦ ˘ ˘ ¦ Ѓ Â

ip ssh peer *username* **public-key {rsa | dsa}** *filename*

no ip ssh peer *username* **public-key {rsa | dsa}** *filename*

username ¦

filenae Ѓ ¦

test RSA ֶ DSA ֱ

```
Ruijie# configure terminal
Ruijie(config)# ip ssh peer
```

л	RGOS10.1 Лъ Э

Ъ ч

л	
-	-

7.1.7 ip ssh version

SSH server Â Ъ ч no ѝй Â

ip ssh version {**1** | **2**}

no ip ssh version

1	SSH Server SSH1
2	SSH Server SSH2

Ю SSH 1 р 2Â ѣ˘ л SSH
Â **no ip ssh version** Ъ ч ≠ л Лъ ѝй Â

Ъ ч

Ъ ч SSH Server SSH Â Ю SSH Server
SSH1 б SSH2˝ SSH 1 SSH 2 л Лъ Â
1 2˝ SSH Â **show ip ssh** Ъ
ч SSH Server Â

2˝

```
Ruijie# configure terminal
Ruijie(config)# ip ssh version 2
```

Ъ ч

Ъ ч	
show ip ssh	SSH Server Â

л	RGOS10.1 Лъ Э

Ъ ч

л	
-	-

7.2

7.2.1 disconnect ssh

SSH Â

disconnect ssh [**vty**] *session-id*

session-id	SSH ʌ˘ ʌ ɲɪ ɨ 0~35 Â

Ъ ч

SSH ʌ˘ SSH Â VTY
ʌ˘ SSH Â SSH ɺɻ Â

```
Ruijie# disconnect ssh 1

Ruijie# disconnect ssh vty 1
```

Ъ ч	
show ssh	SSH Â
Clear line vty *line_number*	VTY Â

ʌ RGOS10.1 Л Э

Ъ ч	ʌ	
	-	-

7.2.2 show crypto key mypubkey

SSH Server Ѽ Ѽ ǂ Â

show crypto key mypubkey {***rsaldsa***}

	-=ľ -ɞ

Ъ ъ

SSH Server Ъ Ъ ¦ Â ' ä
" ä Ъ ¦ Â

Ruijie# **show crypto key mypubkey rsa**

Ъ ъ

Ъ ъ	
crypto key generate {**rsa	dsa**}	DSA б RSA Â

ip ssh time-out time	SSH Server Â
Ip ssh authentication-retries retry times	SSH Server Â

ʌ RGOS10.1 Л Э

Ѣ ҂

ʌ	
-	-

7.2.4 show ssh

SSH Â

show ssh

-	-

Ѣ ҂

SSH Â ‘ . VTY ʌ à SSH à ╗
à à à “ Â

Ruijie# **show ssh**

Ѣ ҂

Ѣ ҂	
-	-

ʌ RGOS10.1 Л Э

Ѣ ҂

ʌ	
-	-

8 GSN

8.1

8.1.1 security address-bind enable

Ъ ҳ ѕ ѭ Â

security address-bind enable

no security address-bind enable

community	˚ ЬЧ *community* Â
username	v3 ¨ Â

Ъ ҳ

p ЬЧ ˘ ЬЧ
¨ ˘ v3˝ ‡ ف **snmp-server** Ъ ҳ Ю v3 ¨ ˘
έ SNMP Ъ ҳ Â

1. v1 community
```
Ruijie(config)# security v1 community public
```
2. v3 ¨ и start
```
Ruijie(config)# security v3 user start
```

Ъ ३ Â **show security event interval** Â

Y

```
Ruijie(config)# security event interval 10
```

Ъ ३	
Ъ ३	

	-	-

8.1.5 smp-server host

Ъ ъ smp-server ip Ч

Ъ ҳ

Y Â

```
Ruijie# show security event interval
Event sending interval(Seconds):5
```

Ъ ҳ	
security event interval *interval*	Y Â

ʌ RGOS10.1 Л Э Â

Ъ ҳ	ʌ	
	-	-

8.2.2 show smp-server

smp server IP

	-	-

Ъ ҳ

smp server IP Â

```
Ruijie# show smp-server
SMP-Server IP' 192.168.20.30
```

Ъ ҳ	
smp-server host	smp server ip Â

ʌ RGOS10.1 Л Э Â

Ъ ҳ	ʌ	

	-	-

9

9.1

9.1.1 strom-control

Â Ð ٣ **no** ╖ Â

storm-control {**broadcast** | **multicast** | **unicast**} [{**level** *percent* | **pps** *packets* | *rate-bps*}]

no storm-control {**broadcast** | **multicast** | **unicast**} [{**level** *percent* | **pps** *packets* | *rate-bps*}]

broadcast	╖ Â
multicast	¨ ╖ Â

unicast **uniq** uńiɗƒD ĠG4Q Đ € À l!qð 0

```
Ruijie# configure terminal
Ruijie(config)# interface GigabitEthernet 1/1
Ruijie(config-if)# storm-control multicast 4096
Ruijie(config-if)# end
```

Ъ ҳ

Ъ ҳ	
show storm-control	Â

л 86 **pps** ѝ æ Â

Ъ ҳ

л	
-	-

9.1.2 switchport protected

Ъ ҳ ѝ Â Ъ ҳ **no** Â

switchport protected

no switchport protected

-	-

Ъ ҳ

ѝ ѣ˘ Ю n a ү л љ
З ˘ б л љ Â **show interfaces** Ъ ҳ
Â

```
Ruijie(config)# interface gigabitethernet 1/1
Ruijie(config-if)# switchport protected
```

Ъ ҳ '	

Ъ ३	⁄	
	-	-

9.1.3 switchport port-security

ᄀ ˘ Â Ъ ३ no ˘
Â

switchport port-security

Ъ ҳ	ʌ	
	-	-

9.1.4 switchport port-security aging

Ъ ҳ ѝ Э кѧ ѧ Â ╖ ˘ кѧ ѧ
˘ ˘ ʌ Л Ъ ╕ Ц Э кѧ ѧ Â Ъ ҳ no
˙ кѧ ѧ˘ ╖ Â

switchport port-security aging {**static** | **time time** }

no switchport port-security aging {**static** | **time** }

Static	˘ кѧ ѧ Ц ˙ кѧ ѧ˘ ‡ ‡ ˙ кѧ ѧ Â
time time	Э кѧ ѧ ˘ нз 0ʊ 1440ʊ æ ǀ Â ѝ 0ʊ ‡ ╖ Э Â

a кѧ ѧ

Ъ ҳ

ʌ Л Ъ ф Ю Ъ ҳ **no switchport port-security aging time**
кѧ ѧ ╖ ˘ Ъ ҳ **no switchport port-security aging static**
˙ кѧ ѧ Â

show port-security Ъ ҳ Â

```
Ruijie(config)# interface gigabitethernet 1/1
Ruijie(config-if)# switchport port-security aging time 8
Ruijie(config-if)# switchport port-security aging static
```

[redacted] 6s 1ˆ @ Á • À/ W 8 'ƒbc 8

	-	-

9.1.5 switchport port-security binding

switchport port-security	
switchport port-security binding	Ю кѧ ѧ
Switchport port-security mac-address	кѧ ѧ
switchport port-security aging	кѧ ѧ
show port-security	

Л

Ъ ҙ	
Л	
-	-

9.1.7 switchport port-security maximum

кѧ ѧ ˘ no Л ‘

switchport port-security maximum *value*

[**no**] **switchport port-security maximum**

value	кѧ ѧ 1-128

128

Ъ ҙ

кѧ ѧ n ˉ кѧ ѧ n˘ ѝ 128 ˘
кѧ ѧ кѧ ѧ ˘

1‘ 10 кѧ ѧ ѝ 2‘

```
Ruijie(config)#inter g0/10
Ruijie(config-if)# switchport port-security maximum 2
```

Ъ ҙ	Ъ ҙ	
	switchport port-security	
	switchport port-security binding	кѧ ѧ
	Switchport port-security mac-address	Ю кѧ ѧ

	show port-security	

/1

	/1	

ﻸ

Ъ ٦

ﻸ	
-	-

9.1.10 switchport port-security sticky mac-address

Ю Stickk MAC ھ ک ˘ no ھ ک ˙

[**no**] **switchport port-security mac-address sticky *mac-address*** [*vlan vlan-id*]

a ˘ Sticky MAC ھ ک ھ ˝ ╖ ˘ no Sticky MAC ھ ک ھ ˝ ╖ ˙

[**no**] **switchport port-security mac-address sticky**

mac-address	ھ ک
vlan-id	MAC ھ ک VID ˙ فخ TRUNK Ю vlan-id

Sticky MAC ˝ ╖ Ю Â

Ъ ٦

1˙ 10 Sticky MAC ھ ک ھ ˝ ˙

```
Ruijie(config)#inter g0/10
Ruijie(config-if)# switchport port-security
Ruijie(config-if)# switchport port-security sticky mac-address
Ruijie(config-if)# end
```

2˙ TRUNK 10 Sticky ھ ک ھ 00d0.f800.5555 VID=2˙

```
Ruijie(config)#inter g0/10
Ruijie(config-if)# no switchport port-security sticky mac-address
00d0.f800.5555 vlan 2
Ruijie(config-if)# end
```

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switchport port-security	
switchport port-security binding	ھ ک

Switchport port-security mac-address	Ю ھ ک
switchport port-security mac-address interface	Ю ھ ک
switchport port-security aging	ھ ک
show port-security	

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RGOS 10.4(3)	Sticky MAC ╖ ÿ 10.4(3)

9.2

9.2.1 show storm-control

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show storm-control [*interface-id*]

interface-id	Â

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Ruijie# **show storm-control gigabitethernet** *1/1*
Interface Broadcast Control Multicast Control Unicast Control
---------- ---------- ----------
Gi1/1 Disabled Disabled Disabled

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storm-control	Â

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10 CPU

10.1

10.1.1 cpu-protect type packet-type pps pps_value

CPU ш Â

cpu-protect type { **arp** | **bpdu** | **dhcp** | **ipv6mc** | **igmp** | **rip** | **ospf** | **vrrp** | **pim** | **ttl1** | **unknown-ipmc** | **dvmrp** | …} **pps** *pps_value*

pps_value	Â

CPU ш й 1000 Â

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Ю CPU BPDU ‘

pri_num	ID ٨ ىز ى 0 7

شخ ى 0Â

Ъ ҙ Â

Ю BPDU 7

```
Ruijie(config)# cpu-protect type bpdu pri 7
Set packet type bpdu pri 7.
```

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cpu-protect type packet-type pps *pps_value*	شخ Â

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10.2

10.2.1 show cpu-protect mboard

CPU Â

show cpu-protect mboard

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Ъ ҙ CPU Â

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Ъ ҳ	
show cpu-protect slot *slot-num*	. CPU Â

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10.2.2 show cpu-protect slot

. CPP Â

show cpu-protect slot *slot_num*

slot_num	ʌ ѓz и 1-16 Â

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Ъ ҳ . CPP Â

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```
vrrp         200         0         0
unknow-ipmc  200         0         0
ttl1         20          3         0
```

Ъ ҳ

Ъ ҳ	
show cpu-protect mboard	CPU Â

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10.2.3 show cpu-protect type

ҳ ښخ

show cpu-protect type { **arp** | **bpdu** | **dhcp** | **ipv6mc** | **igmp** | **rip** | **ospf** | **vrrp** | **pim** | **ttl1** | **unknown-ipmc** | **dvmrp | …**} *dvmrp*

slot_num	ʌ ټر ѝ 1-16 Â

Ъ ҳ Â

Ъ ҳ ښخ Â

ЛЬЮ **show cpu-protect type bpdu** Ъ ҳ BPDU

```
Ruijie(config)# show cpu-protect type arp
Slot      Type         Pps       Total      Drop
--------- ------------ --------- --------- ---------
MainBoard bpdu          100        30         0
Slot-2    bpdu          100        30         0
```

Ъ ҳ

Ъ ҳ	
show cpu-protect type *packet-type*	CPU Â

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ASCII-string	Option82 remote-id ѝ Ж Â

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Ъ ъ˘ ф DHCP ╖ Option82 remote-id ѝ Ж
˘ DHCP ┗ Option82 Â

Ю ф DHCP ╖ Option82 remote-id ў ѝ ў ‟ ‘

```
Ruijie# configure terminal
Ruijie(config)# ip dhcp snooping information option format remote-id
hostname
```

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Ъ ъ	

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Ъ ъ˘ ف DHCP ╕ Option82 circuit-id и Ш˘ DHCP ┴ Option82 ك Â

Ю ف DHCP ╕ Option82 circuit-id Ш

```
Ruijie# configure terminal
Ruijie(config)# ip dhcp snooping vlan 1 information option
format-type circuit-id ruijie
```

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12.1.8 ip dhcp snooping vlan information option change-vlan-to vlan

Ю Option82 circuit-id vlan ˘ ف Ю Ъ ъ Â Ъ ъ **no** ˘ ╕

[**no**] **ip dhcp snooping vlan** *vlan-id* **information option change-vlan-to vlan** *vlan-id*

vlan-id	VLAN
vlan-id	VLAN

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Ъ ъ

Ъ ъ˘ ف DHCP ╕ Option82 circuit-id и VLAN˘ DHCP ┴ Option82 ك Â

Ю ف DHCP ╕ Option82 circuit-id и VLAN

```
Ruijie# configure terminal
Ruijie(config)# ip dhcp snooping vlan 1 information option
```

change-vlan-to vlan 2

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12.1.9 Ip dhcp snooping vlan

VLAN DHCP Snooping ╖ ˘ ффф Ю Ъ ъ Â Ъ ъ no ˘ VLAN DHCP Snooping ╖ Â

[**no**] **ip dhcp snooping vlan** {*vlan-rng* **|** {*vlan-min* [*vlan-max*]}}

vlan-rng	dhcp snooping ╖ vlan ттт Â

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12.1.10 ip dhcp snooping verify mac-address

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12.2 DHCP snooping

12.2.1 ip dhcp snooping limit rate

DHCP ˘ ફ IO Ъ ३ Â Ъ ३

no ˘ ग Â

[**no**] **ip dhcp snooping limit rate** *rate-value*

rate-value	ख I P ख ˘ PPS[Pdd Y # ग

```
------------------------  -------    ------------
FastEthernet0/1            NO         100
```

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Ъ ъ	
show ip dhcp snooping	DHCP snooping Â

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12.2.2 ip dhcp snooping suppression

и suppression ˘ Ъф Ю Ъ ъ Â Ъ ъ no ˘ и no suppression Â

[no] ip dhcp snooping suppression

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12.2.3 ip dhcp snooping trust

DHCP snooping й TRUST ˘ ﬀ Ю Ъ ъ Â
Ъ ъ no ˘ й UNTRUST Â

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ip dhcp snooping bootp-bind	DHCP Snooping Bootp ╖ Â
ip dhcp snooping trust	ѝ DHCP snooping trust Â

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dhcp snooping binding

DHCP Snooping ˘ ﬁ Ю Ъ ҳ Â

dhcp snooping binding

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Ъ ҳ˘ ⁄ Л Ъ DHCP Snooping Â

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```
Ruijie# show ip dhcp snooping binding
Total number of bindings: 1

MacAddress    IpAddress   Lease(sec)  Type    VLAN  Interface
-----------   --------    --------    -----   ----  ---------
0000.0000.0001 1.1.1.1  78128  dhcp-snooping  1  FastEthernet 0/1
```

Ъ ҳ	
ip dhcp snooping binding	DHCP snooping
clear ip dhc **D**	**DHCP sooping!**╔ ﻉ