

I G\$AJME

ASME_RGOS11.1(6)B24

V) %

copyright © 2018



z

z

z

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

z <http://webchat.ruijie.com.cn>

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

z 7×24 4008-111-000

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

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

z 4008111000@ruijie.com.cn

1. Q ,> a4z n

[] []

{x|y|...}

[x|y|...]

//

2. Ø0 Û«

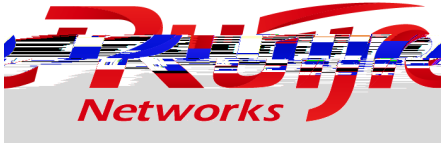


u

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1

1.1

(Command Line Interface CLI)

1.2

<u>CLI</u>	
------------	--

1.2.1 CLI

A

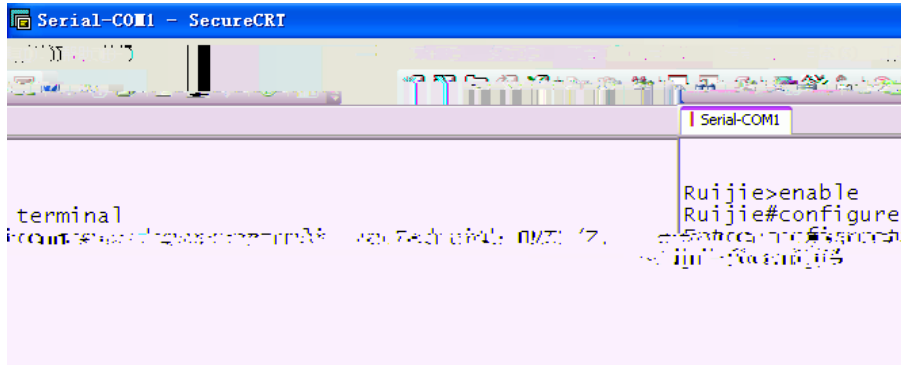
1-1



A
PC

PC Secure CRT A

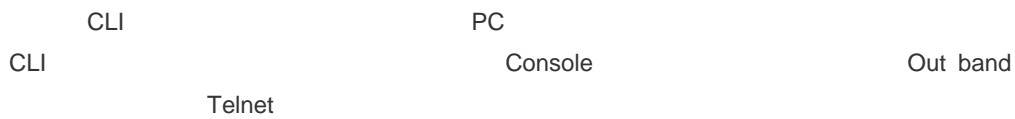
1-2



1.3

<u>CLI</u>	
<u>CLI</u>	
<u>CLI</u>	CLI
<u>no default</u>	no default
<u>CLI</u>	
<u>show</u>	show
<u>CLI</u>	

1.3.1 CLI



1.3.2

show User EXEC

Privileged EXEC

“Ruijie”

User EXEC ()		Ruijie>	exit	enable
Privileged EXEC ()	enable	Ruijie#	disable configure	
Global configuration ()	configure	Ruijie(config)#	end Ctrl+C interface VLAN vlan vlan_id end	exit interface
Interface configuration ()	interface	Ruijie(config-if)#	exit	Ctrl+C interface

```

5XLMLH!"
([HF FRPPDQGV
      !      6HVVLRO QXPEHU WR UHVXPH
GLVDEOH      7XUQ RII SULYLOHJHG FRPPDQGV
GLVFRQQHFW 'LVFRQQHFW DQ H[LVWLQJ QHWZRUN FRQQHFWLRO
HQDEOH      7XUQ RQ SULYLOHJHG FRPPDQGV
H[LW        ([LW IURP WKH (;(&
KHOS        'HVFULSWLRO RI WKH LQWHUDFWLYH KHOS V\WHP
ORFN        /RFN WKH WHUPLQDO
SLQJ        6HQG HFKR PHVVDJHV
VKRZ        6KRZ UXQQLOJ V\WHP LQIRUPDWLRO
WHOQHW      2SHQ D WHOQHW FRQQHFWLRO
WUDFHURXWH 7UDFH URXWH WR GHVWLQDWLRO

```

2. ?

```

5XLMLH FRQILJ LQWHUIDFH "
$JJUHJDWHSRUW $JJUHJDWH SRUW LQWHUIDFH
'LDOHU        'LDOHU LQWHUIDFH
*LJDELW(WKHUQHW *LJDELW (WKHUQHW LQWHUIDFH
/RRSEDFN     /RRSEDFN LQWHUIDFH
OXOWLQLOLN  OXOWLQLOLN JURXS LQWHUIDFH
1XOO        1XOO LQWHUIDFH
7XQQHO      7XQQHO LQWHUIDFH
9LUWXDO SSS 9LUWXDO 333 LQWHUIDFH
9LUWXDO WHP SODWH 9LUWXDO 7HPSODWH LQWHUIDFH
9ODQ        9ODQ LQWHUIDFH
UDQJH       ,QWHUIDFH UDQJH FRPPDQG

```



```

5XLMLH FRQILJ LQWHUIDFH YODQ "
      ! 9ODQ SRUW QXPEHU

```

3. ?

```

5XLMLH G"
GHEXJ GHOHWH GLDJQRVWLF GLU GLVDEOH GLVFRQQHFW

```

4. <Tab>

```

5XLMLH VKRZ FRQI 7DE!

```

```
5XLMLH VKRZ FRQILJXUDWLRQ
```

5. **help**

```
5XLMLH FRQILJ KHOS
+HOS PD\ EH UHTXHVWHG DW DQ\ SRLQW LQ D FRPPDQG E\ HQWHULQJ
D TXHVWLRQ PDUN " ,I QRWKLQJ PDWFKHV WKH KHOS OLVW ZLOO
EH HPSW\ DQG \RX PXPW EDFNXS XQWLO HQWHULQJ D " VKRZV WKH
DYDLODEOH RSWLRQV
7ZR VW\OHV RI KHOS DUH SURYLGHG
)XOO KHOS LV DYDLODEOH ZKHQ \RX DUH UH DG\ WR HQWHU D
FRPPDQG DUJXPHQW H J VKRZ " DQG GHVFULEHV HDFK SRVVLEOH
DUJXPHQW
3DUWLDO KHOS LV SURYLGHG ZKHQ DQ DEEUHYLDWHG DUJXPHQW LV HQWH
DQG \RX ZDQW WR NQRZ ZKDW DUJXPHQVV PDWFK WKH LQSWXW
H J VKRZ SU"
```

1.3.4

GigabitEthernet 0/1

interface gigabitEthernet 0/1

```
5XLMLH FRQILJ LQW J
5XLMLH FRQILJ LI *LJDELW(WKHUQHW
```

1.3.5 **no default**

```
no shutdown no shutdown no
no default default
no default no default
no default default u
```

1.3.6

CLI

% Ambiguous command: "show c"		
% Incomplete command.		
% Invalid input detected at '^' marker.		^

1.3.7

Ctrl-P	
Ctrl-N	Ctrl-P



VT100 u

1.3.8

	Ctrl-B	
	Ctrl-F	

1.

```
ip route 0.0.0.0 0.0.0.0 192.1.1.1 mygateway mygateway
```

2.

```
ip address ia IP ia IP
```

!

show aliases

```
5XLMLH FRQILJ VKRZ DOLDVHV  
([HF PRGH DOLDV  
K KHOS  
S SLQJ  
V VKRZ  
X XQGHXJ  
XQ XQGHXJ
```

!

u

!

```
alias mode command-alias original-command  
mode  
command-alias  
original-command
```

alias ?

!

show aliases

z

z

z

```
S          SLQJ
V          VKRZ
X          XQGHEXJ
XQ        XQGHEXJ
* OREDO FRQILJXUDWLRO PRGH DOLDV
LU        LS URXWH
```

```
ir          0.0.0.0 0.0.0.0 192.168.1.1
```

show running-config

```
5XLMLH FRQILJ LU
5XLMLH FRQILJ VKRZ UXQQLQJ

%XLOGLQJ FRQILJXUDWLRO

DOLDV FRQILJ LU LS URXWH

LS URXWH                                     LU
```

1.

*

```
FRPPDQG DOLDV RULJLQDO FRPPDQG
```

EXEC

5XLMLH FRQILJ LI LS DGGUHVV

2

2.1



u

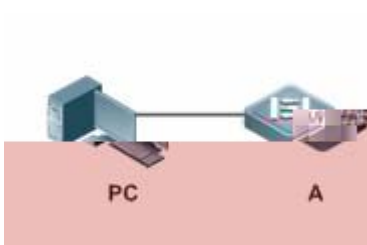
2.2

--	--

2.2.1

A

2-1



2.3

ì TFTP

TFTP Trivial File Transfer Protocol,

TCP/IP

AAA

AAA Authentication Authorization Accounting

Authentication

Authorization

Accounting

Telnet

Telnet OSI 7 ---

Internet

Telnet

TCP/IP

Ctrl

Boot

	AAA
	NVRAM
<u>Telnet</u>	Telnet TCP/IP

2.3.1

ì

0 0-15 16 15 0-1
2-15

ì

password security password 15 security
0 15 password security 15 password
security 15 password security
password security

ì

16 1 15

ì

ì

password

z **enable password** password

ì

secret

z **enable secret**

z

ì /

z enable / disable /

z

ì line

z TELNET line

z password[0 | 7] line login

z lock

2.3.2

AAA

ì

z **username**

ì

z **LINE**

!

(System Name)

Ruijie

32

32

!

banner

z

z

!

!

!

z **clock set**

!

z **clock update-calendar**

!

z **hostname**

z Ruijie

!

z **prompt**

!

z

Z **banner motd**

z

ì

z

z **banner login**

ì

z **speed**

z 9600

2.3.4

NVRAM

ì

running-config

ì

NVRAM
startup-config

startup-config

NVRAM startup-config

ì

show running-config [interface interface]

ì

show startup-config

ì

write copy running-config startup-config

2.3.5 Telnet

Telnet TCP/IP

Telnet Client

Telnet

Telnet Client

A

telnet

z

mmm hhh:mm

z



at

u

u

u

u






31

u

u

,

	 u u
<hr/>	clock set
	clock update-calendar
	hostname
	prompt
	banner motd
	bannerlogin
	speed
<hr/>	 u u
	enable service
<hr/>	 u u
	reload

```
ì secret
z
Z enable secret
Z password secret
```

```
ì
z
z
```

```
ì /
z
z enable / disable /
```

```
ì line
z TELNET line
z password[ 0 | 7 ] line line login
ì line u
```

```
z show privilege
z show running-config
```

```
ì password
enable password [ level level ] { password [ [ 0 | 7 ] encrypted-password }
```

password[0 | 7] line

0

7

line

line

-

ì

line

login

-

line

-

ì

reload

1

1

"test"

reload

1

```
5XLMLH FRQILJXUH WHUPLQDO
```

```
5XLMLH FRQILJ SULYLOHJH H[HF DOO OHYHO UHORDG
```

```
5XLMLH FRQILJ HQDEOH VHFUHW OHYHO WHVW
```

```
5XLMLH FRQILJ HQG
```

1

reload

```
5XLMLH GLVDEOH
```

```
5XLMLH! UHORDG "
```

```
DW UHORDG DW
```

```
FU!
```

z

2.4.2

z

Telnet Server

z Telnet

z Telnet Server

z

z

z

z

z

z

z LINE

z

z

z

z line line EXEC lock

z **show running-config**

z AAA

z AAA AAA

z **show user**

z Telnet Server Telnet

z

z **show sessions** Telnet Client

z

username name [

oper-mode path] [**privilege** privilege-level] [**reject remote-login**] [**web-auth**] [**pwd-modify**]
[**nopassword** | **password** [0 | 7] text-string]

name

login mode

aux aux

console console

ssh ssh

telnet telnet

online amount number

permission oper-mode path op-mode path

privilege privilege-level 0 15

reject remote-login

web-auth web

pwd-modify web **web-auth**

nopassword

password [0 | 7] text-string 0 7

7

7

7

!

login local

-

line

AAA

LINE

username

!

AAA

AAA

login access non-aaa

-

AAA

LINE

AAA

!

Telnet Client

telnet [**oob**] host [port] [/**source** { **ip** A.B.C.D | **interface** interface-name }]

oob: MGMT Telnet MGMT

Host Telnet

IPV4 Telnet

LINE
LINE **no session-timeout**

z

2.4.3

z

z

ì

z

z



u

ì

z

z

ì

z

ì

z

ì

z

z

ì

z

ì

z

z

no prompt

ì

banner motd c message c

c ('&')

255

ì

banner login c message c

c ('&')

255

00d(TB063105780458072.22T>113</C2D

```
5XLMLH FRQILJ EDQQHU PRWG
(QWHU 7(;7 PHVVDJH (QG ZLWK WKH FKDUDFWHU
1RWLFH V\WHP ZLOO VKXWGRZO RQ -XO\ WK
5XLMLH FRQILJ
```

show running-config

Telnet SSH

```
& ?!WHOQHW
1RWLFH V\WHP ZLOO VKXWGRZO RQ -XO\ WK
$FFHVV IRU DXWKRULJHG XVHUV RQO\ 3OHDVH HQWHU \RXU SDVVZ
8VHU $FFHVV 9HULILFDWLRQ
3DVVZRUG
```

i

(#)

“Access for authorized users only. Please enter your password.”

```
5XLMLH FRQILJ EDQQHU ORJLQ
(QWHU 7(;7 PHVVDJH (QG ZLWK WKH FKDUDFWHU
$FFHVV IRU DXWKRULJHG XVHUV RQO\ 3OHDVH HQWHU \RXU SDVVZ
5XLMLH FRQILJ
```

show running-config

Telnet SSH

```
& ?!WHOQHW
1RWLFH V\WHP ZLOO VKXWGRZO RQ -XO\ WK
$FFHVV IRU DXWKRULJHG XVHUV RQO\ 3OHDVH HQWHU \RXU SDVVZ
8VHU $FFHVV 9HULILFDWLRQ
3DVVZRUG
```

i

57600 bps

57600 bps

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ OLQH FRQVROH
5XLMLH FRQILJ OLQH VSHHG
5XLMLH FRQILJ OLQH HQG
```

show

```
5XLMLH VKRZ OLQH FRQVROH
& 21 7\SH VSHHG 2YHUUXQV
& 21
/LQH /RFDWLRQ 7\SH YW
```

57600 bps

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ OLQH FRQVROH
5XLMLH FRQILJ OLQH VSHHG
5XLMLH FRQILJ OLQH HQG
```

show

```
/HQJWK OLQHV :LGWK FROXPQV
6SHFLDO &KDUV (VFDSH 'LVFRQQHFW $FWLYDWLRO
AA[ QRQH AO
7LPHRXWV ,GOH (;(& ,GOH 6HVVLRO
QHYHU QHYHU
+LVWRU\ LV HQDEOHG KLVWRU\ VL]H LV
7RWDO LQSXW E\WHV
7RWDO RXWSXW E\WHV
'DWD RYHUIORZ E\WHV
VWRS U[ LQWHUUXSW WLPHV
ORGHP 5($' <
```

z

2.4.4

z

SSH Server / Telnet Server

-

ì **SNMP Server / SSH Server / Telnet Server**

z

- z **show running-config**
- z **show services**

SSH-Server/telnet-server/snmp-agent

enable service { ssh-server telnet-server }		
ssh-server	SSH Server	IPv4
telnet-server	Telnet Server	IPv4
snmp-agent	Snmp Agent	IPv4

SSH Server

```
SSH Server
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ HQDEOH VHUYL 5 6 +V 6 KI UYHUY HU
```

!

reload

!

U H O R D G D W K K P P V V P R Q W K G D \ \ H D U

month day year ,



at

u

u

u

u



u

,

u

-

!

reload [**at** { hh [:mm [:ss]] } [month [day [year]]]]

at hh:mm:ss

month 1-12

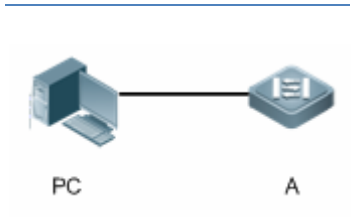
day 1 31

year 1993-2035

\$

show line { console line-num vty line-num line-num }	
show reload	
show running-config [interface interface]	
show startup-config	NVRAM
show this	
show version [devices module]	
show sessions	Telnet Client

3.2.2 VTU



3-2

A
PC

SSH

VTU

Putty

Telnet

3.3

ì CTU

CTU

Console Port

ì VTU

VTU

Telnet

SSH

3.3.1

!

line

!

show user

clear line

Telnet SSH

```
ì    LINE
```

```
z
```

```
z                line
```

```
ì    /    LINE VTY
```

```
z
```

```
z                LINE
```

```
show line
```

```
ì    LINE
```

```
    line [console | vty ] first-line [ last-line ]
```

```
    console
```

```
    vty                Telnet  SSH
```

```
    first-line        first-line
```

```
    last-line         last-line
```

```
-
```

```
ì    /    LINE VTY
```

```
    line vty line-number
```

```
    line-number  VTY                0~35
```

```
    no line vty line-number                VTY
```

```
ì
```

```
show line { console line-num | vty line-num | line-num }
```

```
console
```

```
vty                Telnet  SSH
```

line-num line

-

i

3-3



PC A

show user
show line console 0

```

A
line vty          VTY          36
5XLMLH VKRZ XVHU
/LQH             8VHU             +RVW V             ,GOH             /RFD
FRQ             LGOH
5XLMLH VKRZ OLQH FRQVROH
&21             7\SH             VSHHG             2YHUUXQV
&21
/LQH             /RFDWLRQ             7\SH             YW
/HQJWK             OLQHV             :LGWK             FROXPQV
6SHFLDO &KDUV (VFDSH 'LVFRQQHFW $FWLYDWLRQ
AA[             A'             AO
7LPHRXWV             ,GOH (;(&             ,GOH 6HVVLRO
QHYHU
+LVWRU\ LV HQDEOHG KLVWRU\ VL]H LV
7RWDO LQSXW             E\WHV
7RWDO RXWSXW             E\WHV
'DWD RYHUIORZ             E\WHV
VWRS U[ LQWHUUXSW             WLPHV
5XLMLH VKRZ OLQH YW\ "
!             /LQH QXPEHU
    
```

```
OLQH YW\  
ORJLQ  
  
HQQ
```

3.5



clear

u

```
clear line { console line-num | vty line-num line4um
```

4

4.1

```

z Switch A Switch B GigabitEthernet 1/0/1 GigabitEthernet 2/0/1
z Switch B Switch C GigabitEthernet 2/0/2 GigabitEthernet 3/0/1
z GigabitEthernet 1/0/1 GigabitEthernet 2/0/1 GigabitEthernet 2/0/2 GigabitEthernet3/0/1 Trunk
z Switch A Switch C (Switch Virtual Interface, SVI) SVI 1 SVI 1
IP Switch A SVI 1 IP 192.168.1.1/24 Switch C SVI 1 IP
192.168.1.2/24
z Switch A Switch C ping 192.168.1.2 ping 192.168.1.1 B

```

4.3

ì

<u>MTU</u>	MTU
<u>GI5B y • œ</u>	
<u>LinkTrap</u>	LinkTrap µC
<u>Load-interval</u>	

-
- z **GigabitEthernet** device/slot/{ port} - { port}
 - z **TenGigabitEthernet** device/slot/{ port} - { port}
 - z **FortyGigabitEthernet** device/slot/{ port} - { port}
 - z **AggregatePort** Aggregate-port – Aggregate-port 1
 - z **Async**

4.3.3 MTU

MTU

jumbo MTU

MTU 64~9216 MTU 4 1500
t AP t u

MTU

MTU 1500
mtu num MTU

4.3.4

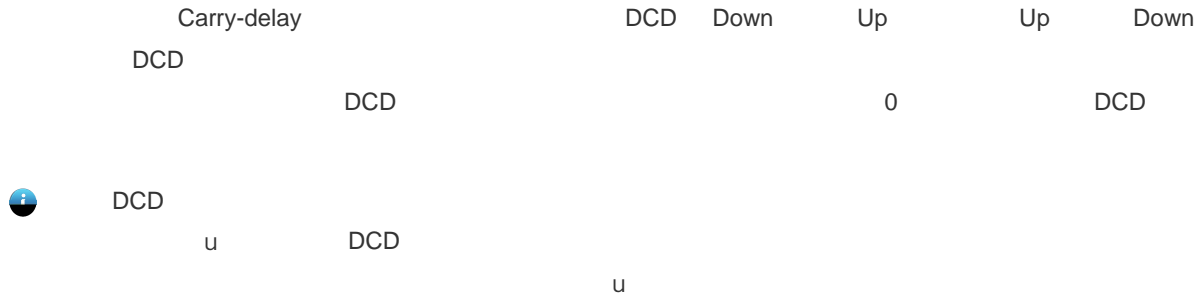
(OSPF) RSVP

u

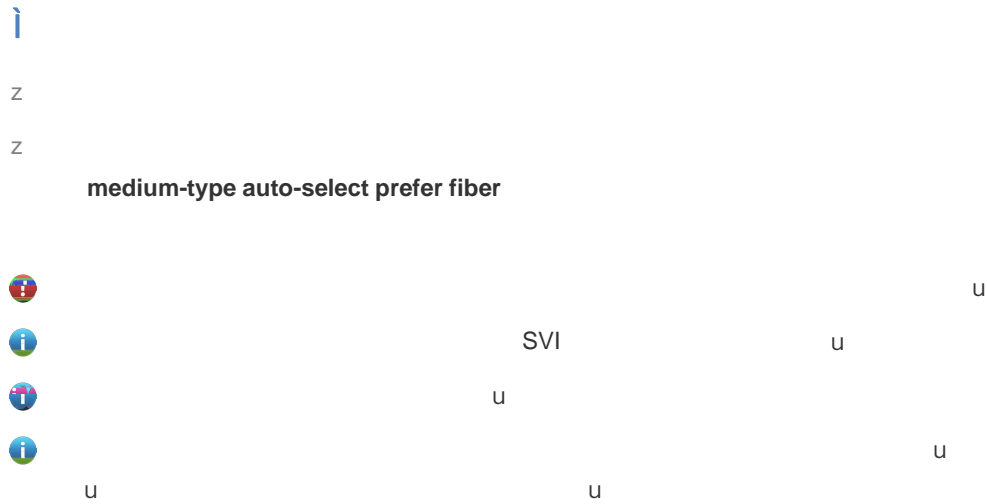
4.3.5 Load-interval

load-interval 10

4.3.6

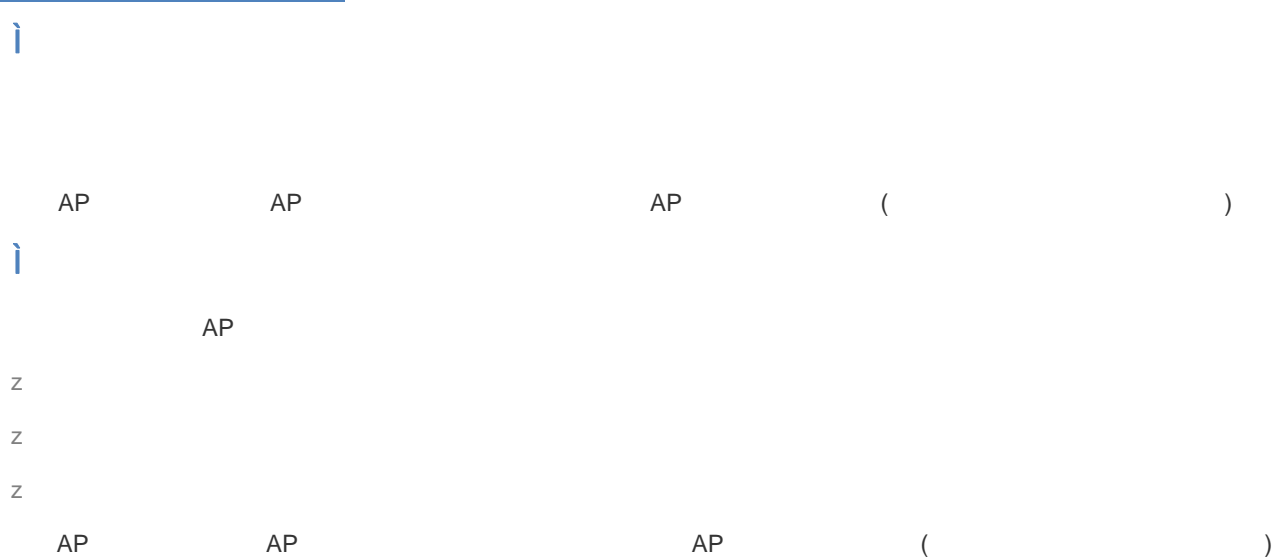


4.3.7



medium-type { auto-select [prefer [fiber | copper]] | fiber | copper }

4.3.8



4.3.9



4.3.10

z 4

z

xau-i-mode

z

!

xau-i-mode slot slot-num
slot-num

no

!

show interface

-

-

!

4 1

4 1

z

4.3.11 Syslog

Syslog

Syslog

4.4.1

z

z

z

z

z

LinkTrap

z

z

no

no

z

default

ì

z

interface interface-type interface-number

interface-type interface-number

AP SVI Loopback

no

default

i

z 4-11 78E9072F0[54C>T04590900>-7<04390BAC>-7<0A7D>-7<059F460F04EB>-7<068F0409>-7<0602>-7<05A809190B2E>-7<0AFE4

z

z

[no] logging [link-updown | error-frame | link-dither]

Syslog

ì

z interface

z no interface

show running

show interfaces

z default interface show running

ì

z interface range

z default interface range show running

ì

z Up shutdown

Down Syslog

interfaces

administratively down

no shutdown

show

Up Syslog

z

4.4.2

z

z

z

ì

z

z

z

z

medium-type { auto-select [prefer [fiber | copper]] | fiber | copper }

auto-select

prefer [fiber | copper]

fiber

copper

medium-type auto-select prefer fiber

ì

MTU

z

z

MTU

z

SVI

mtu num

num 64 9216

MTU

1500

MTU MTU AP

ì
z
z
z

speed [10 | 100 | 1000 | auto]
10 10Mbps
100 100Mbps
1000 1000Mbps
auto

auto

show interfaces

SFP

10M

ì
z
z
z

duplex { auto | full | half }
auto
full
half

auto

show interfaces

ì Ú^Ü X œ £Pß“ 39Gð \$ 8'3 Ð'•Ya-Â Â Pep^Ü •3UPDw — åoz O`Ð]©•Á 'S ü !“ •°

)ORZ UHFHLYH FRQWURO RSHU VWDWXV LV 8QNQRZQ IORZ VHOG
6WRUP &RQWURO %URDGFVDW LV 2)) OXOWLFDVW LV 2)) 8QL
5[ORDG LV 7[ORDG LV
PLOXWHV LQSXW UDWH ELWV VHF SDFNHWV VHF
PLOXWHV RXWSXW UDWH ELWV VHF SDFNHWV VHF

5 HTTP

5.1

HTTP Hypertext Transfer Protocol
TCP

Internet Web

HTTP TCP/IP

HTTPS Hypertext Transfer Protocol Secure

SSL Secure Sockets Layer

HTTPHT49704520B9F07A757F

z HTTP

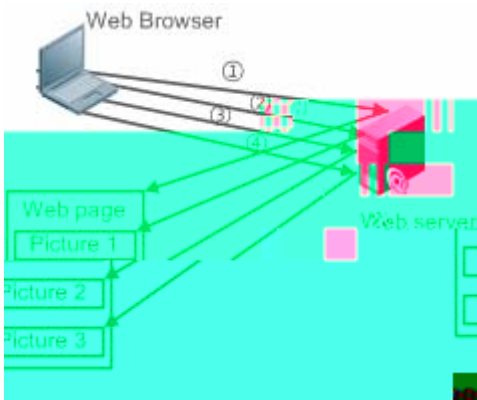
Web server

5.3

HTTP

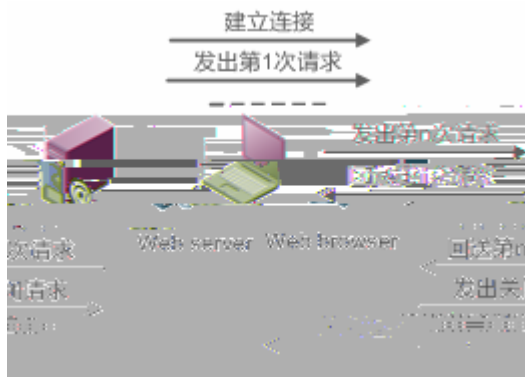


5-3



HTTP/1.1

5-4



HTTP/1.0 HTTP/1.1



[HTTP](#)

5.3.1 HTTP

```

HTTP      Web                Web

-----
Web      Web      Web      HTTP      /      HTTP      Web
  Web    Web      HTTP    HTTP    Web  ( HTTP  )

z                TCP      HTTP      80  HTTPS      4430
z
z                web      cli
z
  
```

ì

HTTP

```

      HTTP
enable service web-server      HTTP      HTTP      HTTPS
      HTTP      Web
  
```

ì

HTTP

```

      0      admin      admin
webmaster level
      Web
  
```

ì

HTTP

```

      HTTP      80
http port      HTTP      80  1025-65535
      HTTP      HTTP
  
```

ì

HTTPS

```

      HTTPS      443
http secure-port      HTTPS      443  1025-65535
      HTTPS      HTTPS
  
```

5.3.2 HTTP

HTTP

z

z

z

z

z

ì

rgos.ruijie.com.cn

http update server

HTTP

HTTP

ì

HTTP

v" @s0E@
fP

&î'



i

```

z          HTTP          HTTP
z          HTTP          80
| HTTPS
z          HTTPS         HTTPS
z          HTTPS         4430
  
```

```

z          http //      ip
z          https //     ip
  
```

| **HTTP**

enable service web-server [http | https | all]

```

http | https | all          http    HTTP    https    HTTPS    all      HTTP
      HTTPS                HTTP    HTTPS
  
```

```

                                all        HTTP    HTTPS    http
                                https       HTTPS
      HTTP
no enable service web-server  default enable service web-server      HTTP
      no      default                HTTP    HTTPS
  
```

| **HTTP**

webmaster level privilege-level **username** name **password** { password | [0 | 7] encrypted-password }

privilege-level

name

ì HTTP

ip http port port-number

port-number HTTP 80 1025-65535

HTTP

ì HTTPS

ip http secure-port port-number

port-number HTTPS 4430 1025-65535

HTTPS

ì Web

Web

z

z

z ping

z http check-version

ì HTTP

http update server { host-name | ip-address } [port port-number]

host-name

ip-address

port port-number 1-65535 80

HTTP

HTTP

1



u



DNS

DNS

u



IPV6u

ì HTTP

http update mode manual

manual

HTTP

HTTP

no HTTP

ì HTTP

http update time daily hh:mm

hh:mm 24 :

HTTP

Web

(rgos.ruijie.com.cn)

Web

no

ì **MGMT**

http update set oob

-

HTTP MGMT
no HTTP
MGMT

ì **HTTP**

http check-version

-

ì

http update { all | string }

all

string

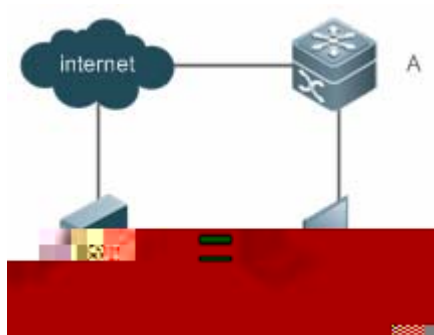
ì **HTTP**

z 2

z

z

5-7



DNS

```
A $ FRQILJXUH WHUPLQDO
$ FRQILJ LS GRPDLQ ORRNXS
$ FRQILJ LS QDPH VHUYHU
$ FRQILJ KWWS XSGDWH WLPH GDLO\
$ FRQILJ KWWS FKHFN YHUVLRQ
$ FRQILJ HQG
$ KWWS XSGDWH DOO
```

-

z DNS

5.5

Web	show web-server status
-----	-------------------------------



ì



t u

ì

/data




6.2.2

ì

ì

ì

6.3

	&	
	 u u	
	show license hostid	
	license install	
	 u u	
	license copy	
	 u u	

	license grace-period	
	▲ u	u

z

z

ì

RUIJIE WEB URL

z

z

ì

z

z

ö" z • %gY•@ À

z

z

6.3.2

z

z

z



4K-10K u

ì

z

z

tar

license { **copy-all** | **copy-file** filename } { **flash:** | **usb0:** } [target-filename]

copy-all

copy-file filename filename filename

filename

flash: flash

usb0: USB

filename

-

-

ì

z

USB

z

dir

show license all-license

installed license

dir

show license all-license

installed license



19881021.lic, 19881023.lic id

u

```
5XLMLH GLU XVE UJ OLFHQVH OLFV
'LUHFWRU\ RI XVE UJ OLFHQVH OLFV
  GUZ[ )UL -XQ
  GUZ[ )UL -XQ
  UZ[ )UL -XQ OLFV WDU
ILOH GLUHFWRULHV
      E\WHV WRWDO E\WHV IUHH
5XLMLH VKRZ OLFHQVH DOO OLFHQVH
6HDUFKLOJ OLFHQVH LQ WKH V\VVHP

6HUULFH QDPH /,& $3
$WWULEXWH 3HUPDQHQW OXOWLSOHBLQVWDQFH 5HOHDVDEO
>,QVWDOOHG OLFHQVHV@ >/LFHQVHG VHULDO QXPEHU@
      OLF /,& $3
      OLF /,& $3
```

z

z

6.3.3

z

z

z

z

]

license grace-period filename days

filename

days

120

-

z 1

z 2 **show license** Alarm starting point

show license { **all-license** | **file** [license] }

all-license

file filename

-

z

z



u

l

z **license update**

z

license update { **flash:** | **usb0:** } filename

flash: flash

usb0: USB

filename

-

-

z **show license** Attribute

show license { **all-license** | **file** [license] }

all-license

file filename

-

z

z

z

z

z

6.3.5

z



u

u

z

z

ì

z

license uninstall

license uninstall { **all** | license [filename] }

all:

license

filename

-

z

show license all-license

Service name

show license { **all-license** | **file** [license] }

all-license

file filename

```
5XLMLH VKRZ OLFHQVH DOO OLFHQVH
6HDUFKLOJ OLFHQVH LQ WKH V\ VWHP
 6HUylFH QDPH /,& )&R(
$WWULEXWH 3HUPDQHqW 6LQJOHBLQVWDQFH 5HOHDVDEOH
/LFHQVHG VHULDO QXPEHU /,& )&2(
```

z

z

6.3.6

z



u

z

z

!

z

license unbind

license unbind pak

pak

-

show license all-license

z

show license all-license

Licensed serial number: 2 5W01 027 Td((5I)-6(6)900>Tj/TT2/C2_24 70CD7C2_0D8

```
$ WWULEXWH 3HUPDQHGW 6LQJOHBLQVWDQFH 5HOHDVDEOH  
/LFHQVHG VHULDO QXPEHU /,& )&2(
```

z

6.4

	show license { all-license file [license]}
	show license usage
	show license hostid
	show license unbind-code

7 PKG_MGMT

7.1

Package Management

TFTP

U

7.2.3

TFTP

U

7.3

ì

RGOS

z boot

boot

z kernel

OS

z rootfs

ì main

z

main

boot

kernel

rootfs

ì RGOS

z RGOS

rootfs

ì

z



u

7.3.1

ì

z boot

norflash

norflash

z kernel

z rootfs

nandflash

nandflash

ì

z boot

boot

boot

boot

z kernel

z rootfs

boot

kernel

rootfs

ì

z

upgrade

7.3.2

ì

z

upgrade

1.1.1

z upgrade

ì

z patch active

z patch running

Z



ì

Z patch deactivate

ì

Z patch delete

7.4

	&	
] > Ò L!4{	 u	
	upgrade url [force]	url
	upgrade download tftp://path [force]	path tftp
	upgrade download oob_tftp://path [force]	path oob_tftp
	upgrade rollback	mgmt
	patch active	
	patch running	
<hr/>	 u	
	upgrade deactivate	
	patch delete	

7.4.1

z main

z

bug

6Ñ

z



main

u

-

ì

main

z

z

upgrade



main

ì

z

z

upgrade

ì

z

bug

z

upgrade

z

patch active

patch running



patch running

u

patch active

u

ì

”

upgrade

main



upgrade

u

z

show upgrade history

z

show component

z

show patch

ì

upgrade url [force]**upgrade download oob_ftp:/path [force]****force**

-

upgrade download tftp:/path [force]**force**

-

ì

show upgrade file url

url

-

ì

show upgrade status(M i^a

ì

show upgrade history

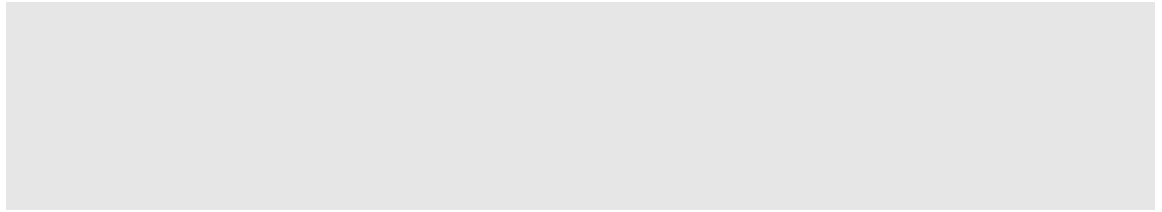
-

ì

upgrade rollback

-

i




```

8SJUDGH SURFHVV LQJ LV
8SJUDGH LQIR >2.@
SDWFKBEULGJH YHUVLRQ> @
8SJUDGH SURFHVV LQJ LV
8SJUDGH LQIR >2.@
SDWFKBLQVWDOO YHUVLRQ> H D@
5XLMLH SDWFK UXQQLQJ
7KH SDWFK RQ WKH V\ VWHP QRZ LV LQ UXQQLQJ VWDWXV
    
```

```

5XLMLH VKRZ SDWFK
SDWFK SDFNDJH SDWFKBLQVWDOO LQVWDOOHG LQ WKH V\ VWHP YH
3DFNDJH SDWFKBEULGJH
VWDWXV UXQQLQJ
9HUVLRQ SD %XLOG WLPH ORQ OD\
VLJH ,QVWDOO WLPH 7XH OD\
'HVFULSWLRQ D SDWFK IRU EULGJH
5HTXLUHG SDFNDJHV 1RQH
    
```

i



```

copy tftp copy xmodem
upgrade url
upgrade download tftp://path tftp
U upgrade url U
    
```

```

5XLMLH XSJUDGH UROOEDFN
NHUQHO UROOEDFN YHUVLRQ> I E I ! I G @ >2.@
URRWIV UROOEDFN YHUVLRQ> EFF H ! DG @ >2.@
5ROOEDFN VXFFHV
5HVWDUW WR WDNH HIIHF
5HORDG V\ VWHP" < 1 \
5HVWDUWLQJ V\ VWHP
    
```

```

5XLMLH VKRZ XSJUDGH KLVWRU\
/DVW 8SJUDGH ,QIRUPDWLRQ
    
```


7.5

	patch delete

	show component [cpmponent _name]
	show patch [patch _name]
kernel rootfs kernel rootfs	show subsys



ASME

Ú 4i ASME, ì G Y " ÙÀ, Ø·8V Ö
1. y 9 E 1u)ÚØ ¢

1

1.1

(Access Sharing Management Engine ASME)

z

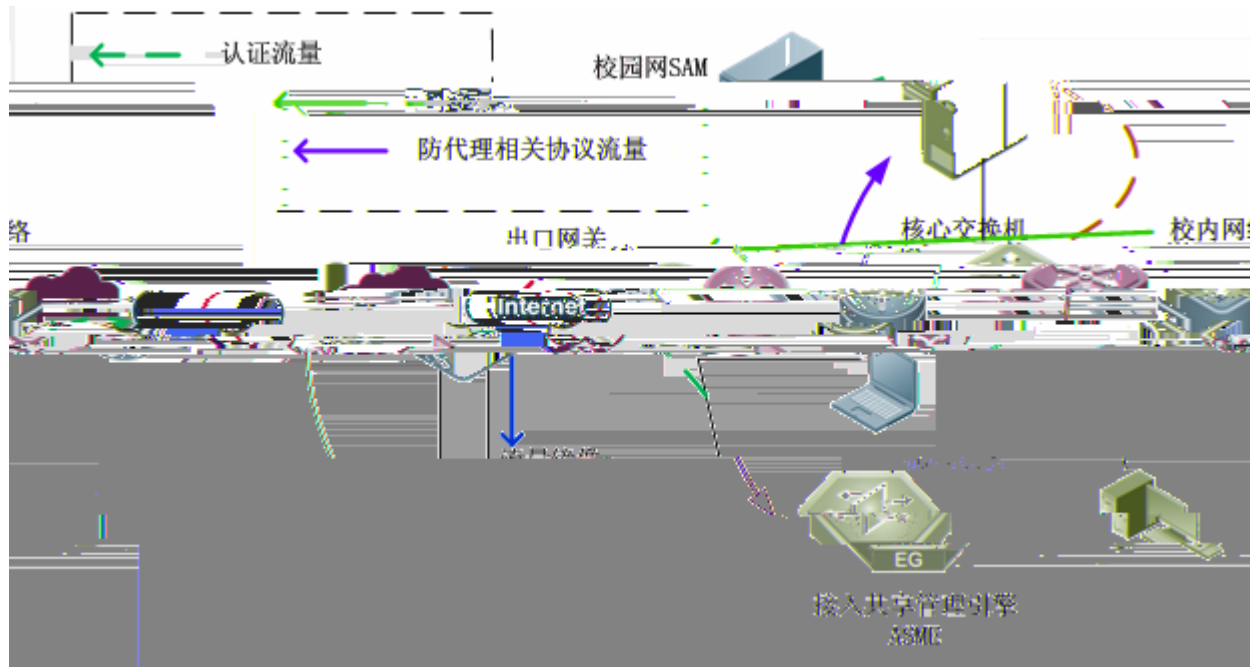
z

VPN

z

z

z



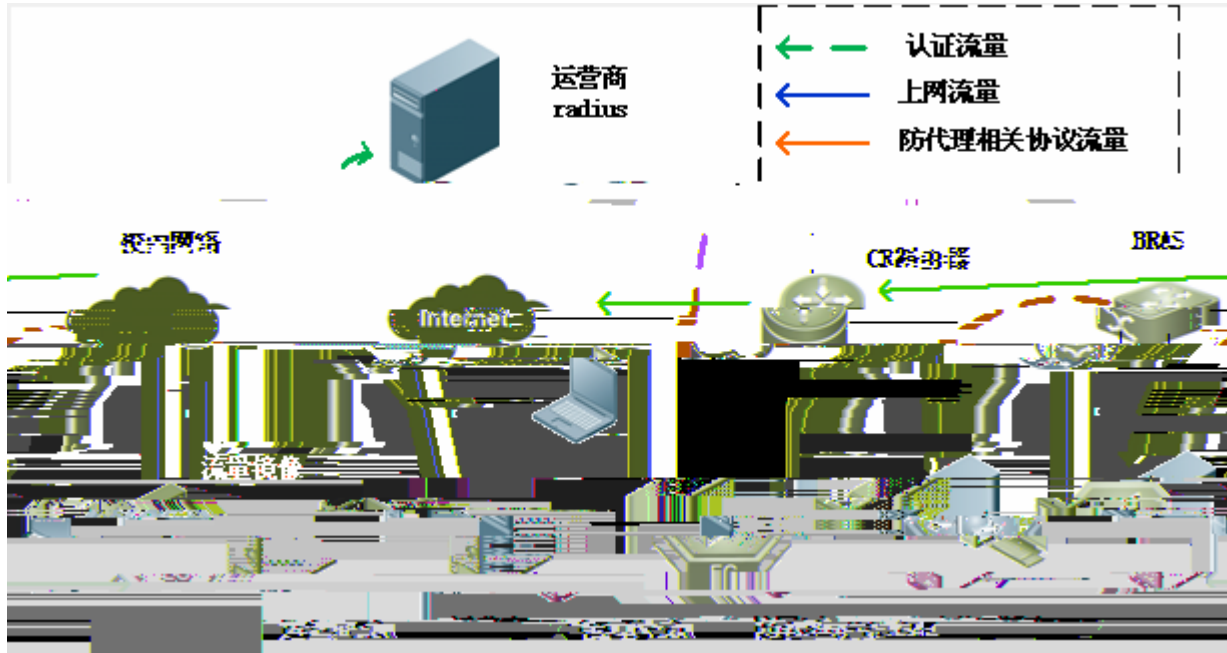
z ASME ASME ASME

z ASME IP

z SAM ASME

1.2.2

SAM SAM ASME



z ASME ASME ASME

z ASME IP

z SAM ASME

▲ PPPoE BRAS ASMEu BRAS

BRAS u

1.3

	SAM

ì

ASME

IP

IP

ì

ASME

pad

PC

ASME

PC

1.3.2

ASME SAM SAM

802.1x

SU

SAM

SU

SU

ePortal PPPoE

ASME

HTTP

s Š ¼ s Š ¼ SAMiU ••gg @b°C•±@SBV& œ (€DW0" »À



i

ASME

0



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u

ASME

DNS

ip

name-server oob <dns server ip>



ASME

http update set oob



ASME

http update asme



no http update mode manual

ASME

auto-update enable




ASME

DNS

u

1.4

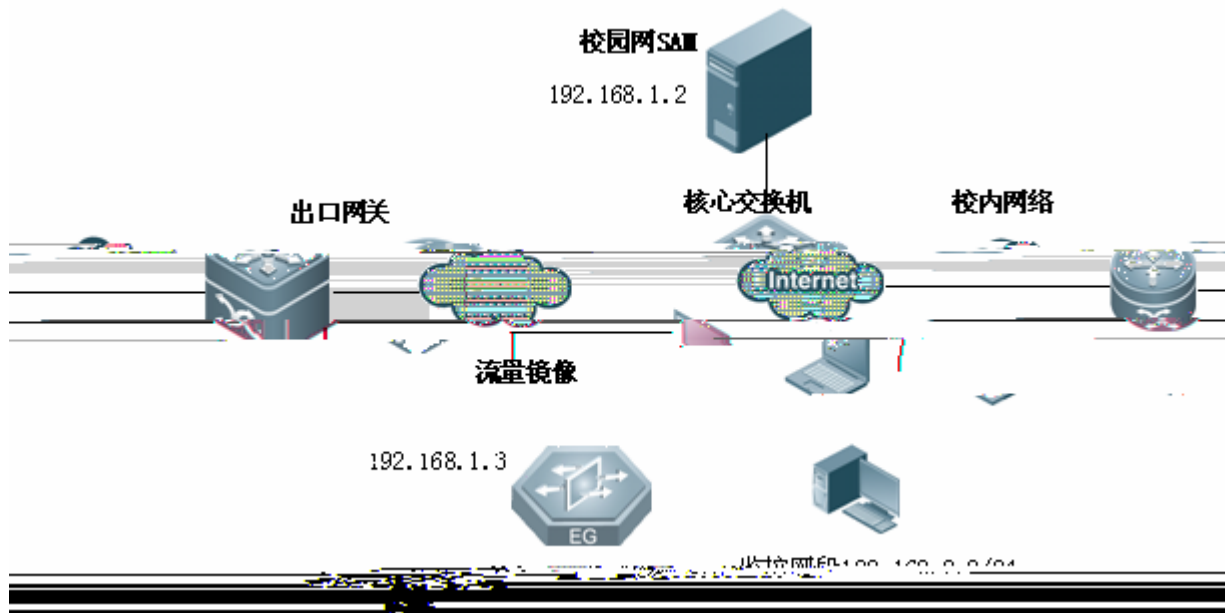
	&	
	ASME	
	ASME	SAM
	u	u
	access-share-monitor	
	u	IP u
	monitor net	IP
	u	u
	access-share-allowed mobile	
	master-terminal	
	router-allowed	
	ignore net	IP
	weight threshold	
	u HTTP	u
	http-warning enable	HTTP
	http-warning interface	HTTP
	http-warning title	HTTP

	http-warning content	HTTP
	http-warning expires	HTTP
	notify-delay	
	 u ASME u	
	auto-update	ASME

1.4.1

ASME

1-3



1.4.2

ASME ASME ASME ASME ASME SAM
1.4.1

i

```

interface GigabitEthernet 1/1 tx ASME interface
GigabitEthernet 1/2 ASME HTTP
trunk native VLAN 4 allow VLAN 4~10
VLAN MAC

```

5 X L M L H F R Q I L J X U H W H U P L Q D O

(QWHU FRQILJXUDWLRO FRPPDQGV RQH SHU OLOH (QG ZLWK &17/ =
5XLMLH FRQILJ PRQLWRU VHVVLRO VRXUFH LQWHUIDFH *LJDELW(WKHUQH
5XLMLH FRQILJ PRQLWRU VHVVLRO GHVWLQDWLRO LQWHUIDFH *LJDELW(W
5XLMLH FRQILJ LQWHUIDFH *LJDELW(WKHUQHW
5XLMLH FRQILJ LI *LJDELW(WKHUQHW VZLWFKSRUW PRGH WUXQN
5XLMLH FRQILJ LI *LJDELW(WKHUQHW VZLWFKSRUW WUXQN DOORZHG YO
5XLMLH FRQILJ LI *LJDELW(WKHUQHW VZLWFKSRUW WUXQN QDWLYH YO
5XLMLH FRQILJ LI *LJDELW(WKHUQHW QR PDF DGGUHVV OHDUQLQJ
5XLMLH FRQILJ LI *LJDELW(WKHUQHW

ì ASME

ASME IP

5XLMLH FRQILJXUH WHUPLQDO
(QWHU FRQILJXUDWLRO FRPPDQGV RQH SHU OLOH (QG ZLWK &17/ =
5XLMLH FRQILJ LQWHUIDFH PJPW
5XLMLH FRQILJ LI OJPW LS DGGU
5XLMLH FRQILJ LI OJPW JDWHZD\
5XLMLH FRQILJ LI OJPW

ì SAM ASME

SAM ASME

Sf-11.445.6 Td<()Tj/C2-J/C2_TDr 0.7Ac 2.28 0 Td(Sf-11.44 -2.6 AM)Tj/C2_0 1333f0 Tc 2.447 0 Td<04



1-5



Z

SAM

1-6 SAM

1 Tf1]TJ

ì

IP

monitor net <network-address> **mask** <mask>

network-address

mask

VPN IP IP
32

i

sensitivity-level { low | normal | high }

config-access-share



normal

u

i

weight threshold <weight-num>

weight-num

config-access-share



5XLMLH FRQILJ DFFHV VVKDUH LJQRUH QHW PDVN
\$GG LSVHW VXFFH' w

HTTP

no http-warning interface

ASME

HTTP

switch

trunk allow VLAN 4~10 native VLAN 4

i HTTP

http-warning title < http-warning title string >

http-warning title string HTTP

o

▯

< http-w12l/TT3 3 0 Td<0601A2D4>Tj/TT2 1 Tf()Tj/C2_0 1

@

f

config-access-share

ASME

HTTP

HTTP

ASME

SAM

z

IP

DNS

z

no http update mode

z ASME

DNS

z

z ASME

5XLMLH FRQILJXUH WHUPLQDO
(QWHU FRQILJXUDWLRQ FRPPDQGV RQH SHU OLOH (QG ZLWK &17
5XLMLH FRQILJ LS QDPH VHUYHU RRE
5XLMLH FRQILJ KWWS XSGDWH VHW RRE
5XLMLH FRQILJ QR KWWS XSGDWH PRGH
5XLMLH FRQILJ KWWS XSGDWH WLPH GDLO\
5XLMLH FRQILJ DFFHVV VKDUH PRQLWRU
5XLMLH FRQILJ DFFHVV VKDUH DXWR XSGDWH HQDEOH
5XLMLH FRQILJ DFFHVV VKDUH H[LW
5XLMLH FRQILJ H[LW
1RY 6<6 &21),*B, &RQILJXUHG IURP FROVROH E\ F
5XLMLH ZU
5XLMLH ZULWH

%XLOGLOJ FRQILJXUDWLRQ

>2.@
5XLMLH

asme

ASME

5XLMLH KWWS XSGDWH DVPH
'RZQORDGLQJ XSGDWHG ILOHV SOHDVH ZDLW
3UHVV &WUO & WR TXLW
DVPH GRZQORDG DQG QRWLI\ VFFFHVVIKOO\
1RY \$60(83'\$7(B68& 8SGDWH \$FFHVV VKDULOJ ODO
UHERRW DIWHU VHFROGV
1RY \$60(83'\$7(B68& 8SJUDGH VRIWZDUH QRZ V\
6HQGLQJ DOO SURFHVVHV WKH 7(50 VLJQDO
6HQGLQJ DOO SURFHVVHV WKH .,// VLJQDO

8QPRXQWLQJ PQW VDWD ILOH V\VVHPV

1.5

	show access-share-monitor statistics

SAM

ASME

ASME

ASME

SAM

SAM

SAM

SAM

z

SAM

1-8



位置: 运维管理 > 开机排行榜

排名前 名

起始时间

结束时间

发送警告信息

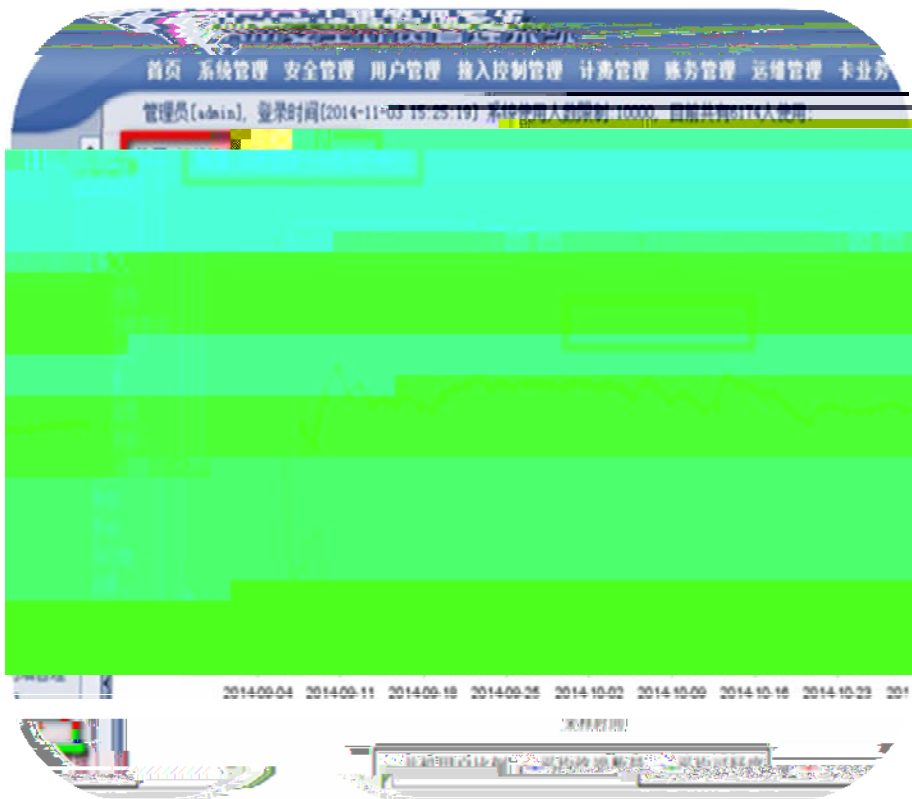
强制用户下线时加入黑名单 分钟内有效: 黑

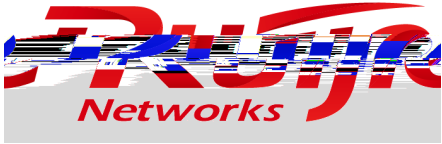
共 100 条记录, 当前显示第 1 到第 100 条记录 定制显示列表

用户名	用户姓名	总在线时长
		47时12分32秒
		29时33分25秒
		14时40分40秒
		103时50分50秒
		228时45分
		34时51分28秒
		77时35分20秒
		68时54分21秒
		98时52分27秒
		188时44分27秒
		248时39分7秒
		438时4分49秒



1-12





1

1.6

UP DOWN



u

-
- z RFC 3164 The BSD syslog Protocol
 - z RFC 5424 The_Syslog_Protocol

1.7

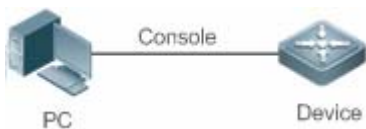
<hr/>	
<hr/>	

1.7.1

1 informational 6

2 ARP IP

1-1



z

1 informational 6

2 terminal

3 contains-only

4 ARP IP

1.7.2

1 IP 10.1.1.1

2 debugging 7

3 Loopback 0



z

1 IPv4 10.1.1.1

2 debugging 7

3 Loopback 0

1.8

ì

z log

z debug

ì

8 emergencies alerts critical errors warnings notifications
 informational debugging 0~7 8 informational
 emergencies ~ informational

emergencies	0	
alerts	1	
critical	2	
errors	3	
warnings	4	
notifications	5	
informational	6	
debugging	7	

ì

5 console monitor server buffer file

console		debugging 7	log debug
monitor		debugging 7	log debug
server		informational 6	log debug
buffer		debugging 7	log debug





20	local4	local use 4 (local4)
21	local5	local use 5 (local5)
22	local6	local use 6 (local6)
23	local7	local use 7 (local7)

5. seq no

6

6. timestamp

datetime

uptime



RTC

uptime

u

RTC

datetime

u

z datetime

datetime

OPP GG \ \ \ \ KK PP VV PVHF

xVb/EApUplfTx0WP wYRVà 6y.èap&B\$AHnô&B8t%z

8. module

2~20

log

module

debug

module

9. level

8

0~7

10. mnemonic

4~32

log

mnemonic

debug

mnemonic

11. content

! RFC5424

SULRULW\!YHUVLRQ WLPHVWDPS V\VQDPH 02'8/(/ (9(/ 01(021,& >VWUXFWX

!

! 7 = UXLMLH 6 < 6 & 2 1), * & RQILJXUHG IURP FR

1. priority

facility * 8 + level

level

facility

RFC5424

facility

local0 16

2. version

RFC5424

1

3. timestamp

RFC5424

<<< 00 '7++ 00 66 6 (&) 5 \$ & =

YYYY		YYYY
MM		MM
DD		DD DT

HH		HH
MM		MM
SS		SS
SECFRAC		SECFRAC 1~6
Z		Z

4. sysname

5. MODULE

module debug 2~20 module log

6. LEVEL

8 0~7

7. MNEMONIC

mnemonic debug 4~32 mnemonic log

8. structured-data

RFC5424 0

> 6 ' B , ' # H Q W H U S U L V H , ' 3 \$ 5 \$ 0 1 \$ 0 (3 \$ 5 \$ 0 9 \$ / 8 (@

SD_ID		
@		@enterpriseID RFC5424 @enterpriseID

enterpriseID

ID

ID IANA

ID

1.8.1

ì

logging on

ì

logging count

1.8.2

RFC5424

ì

RFC5424

RFC5424

RFC5424

service sequence-numbers ^service sysname ^service timestamps ^

service private-syslog ^ service standard-syslog

RFC3164

RFC5424

logging delay-send logging policy

logging statistic

show logging show logging config



1.8.3

ì

logging synchronous

ì

logging rate-limit { number | **all** number | **console** {number | **all** number } } [**except** [severity]]

ì

debugging 7

logging console [level]

ì

terminal monitor

ì

debugging 7

logging monitor [level]

ì

debugging 7

logging buffered [buffer-size] [level]

ì

logging server [**oob**] { ip-address } [**udp-port** port]

ì

informational 6

logging trap [level]

ì

RFC5424

RFC5424

local0

logging facility facility-type

ì

Syslog Server

IP

logging source [interface] interface-type interface

IP

IP

logging source { ip ip-address }

IP

IP

IP

ì

logging file

/TT3 9.597>-7<09E50799>8606BA05A906B60542

/TT3 1 797>-7<09E50799

1.8.4

ì

all

logging filter direction { all | buffer | file | server | terminal }

ì

logging filter type { contains-only | filter-only }

ì

logging filter rule exact-match module module-name **mnemonic** mnemonic-name **level** level

logging filter rule single-match { level level | mnemonic mnemonic-name | module module-name }

1.8.5

LOG

LOG

LOG

ì

LOG

logging userinfo

Log

Log

/ Log







Telnet SSH HTTP

ì

LOG

Log

1.9

&	
<hr style="border: 1px solid blue;"/>	
	service timestamps
	service sysname
	service sequence-numbers
	service standard-syslog
	service private-syslog
	service log-format rfc5424
<hr style="border: 1px solid blue;"/>	
	logging on
	logging count
	logging console
<hr style="border: 1px solid blue;"/>	
	terminal monitor
<hr style="border: 1px solid blue;"/>	logging monitor
	
<hr style="border: 1px solid blue;"/>	logging buffered
<hr style="border: 1px solid blue;"/>	
	logging server
	logging trap
	logging facility facility-type
	logging source [interface] interface-type interface-number
logging source ip ip-address	
<hr style="border: 1px solid blue;"/>	
	logging file
	logging flash interval seconds

	logging life-time level level days	
	▲	
	logging filter direction	
	logging filter type	

ì

service sysname

-

ì

service sequence-numbers

-

1

ì

service standard-syslog

-

W L P H V W D P S P R G X O H O H Y H O P Q H P R Q L F F R Q W H Q W

W L P H V W D P S P R G X O H O H Y H O P Q H P R Q L F F R Q W H Q W

*

:'

ì

service private-syslog

-

W L P H V W D P S P R G X O H O H Y H O P Q H P R Q L F F R Q W H Q W

W L P H V W D P S P R G X O H O H Y H O P Q H P R Q L F F R Q W H Q W

''

:'

'%'

ì

RFC5424

service log-format rfc5424

-

RFC5424 **service sequence-numbers** **service sysname** **service timestamps** **service private-syslog** **service standard-syslog**

statistic RFC5424 **logging delay-send** **logging policy** **logging**

show logging **show logging config**

RFC3164

1 RFC3164
2 **datetime**
3
4

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ QR VHUYLFH ORJ IRUPDW UIF
5XLMLH FRQILJ VHUYLFH WLPHVWDPSV ORJ GDWHWLPH \H DU PVH
5XLMLH FRQILJ VHUYLFH WLPHVWDPSV GHEXJ GDWHWLPH \H DU P
5XLMLH FRQILJ VHUYLFH V\VQDPH
5XLMLH FRQILJ VHUYLFH VHTXHQFH QXPEHUV
```

show logging config

```
/
5XLMLH FRQILJ H[LW
-XQ 5XLMLH 6<6 &21),*B, &RQILJX
FRQVROH
5XLMLH VKRZ ORJJLQJ FRQILJ
6\VORJ ORJJLQJ HQDEOHG
&RQVROH ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJ
ORQLWRU ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
%XIIHU ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
)LOH ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
)LOH QDPH V\VORJBWHVW W[W VL]H .E\WHV KDYH ZULWWHC
6WDQGDUG IRUPDW IDOVH
7LPHVWDPS GHEXJ PHVVDJHV GDWHWLPH
```

```
7LPHVWDPS ORJ PHVVDJHV GDWHWLPH
6HTXHQFH QXPEHU ORJ PHVVDJHV HQDEOH
6\VQDPH ORJ PHVVDJHV HQDEOH
&RXQW ORJ PHVVDJHV HQDEOH
7UDS ORJLQJ OHYHO LQIRUPDWRQDO PHVVDJH OLOHV ORJ
```

1 RFC5424

```
1 RFC5424
RFC5424
```

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ VHUFLH ORJ IRUPDW UIF
```

```
show logging config
/
```

```
5XLMLH VKRZ ORJLQJ FRQILJ
6\VORJ ORJLQJ HQDEOHG
&RQVROH ORJLQJ OHYHO GHEXJLQJ PHVVDJHV ORJJHG
ORQLWRU ORJLQJ OHYHO GHEXJLQJ PHVVDJHV ORJJHG
%XIIHU ORJLQJ OHYHO GHEXJLQJ PHVVDJHV ORJJHG
6WDWLWLF ORJ PHVVDJHV GLVDEOH
6WDWLWLF ORJ PHVVDJHV WR WHUPLQDO GLVDEOH
'HOD\ VHQG ILOH QDPH V\VORJBIWSBVHUYHU &XUHQW ZULWH L
VHFRQGV
&RXQW ORJ PHVVDJHV HQDEOH
7UDS ORJLQJ OHYHO LQIRUPDWRQDO PHVVDJH OLOHV ORJ
ORJLQJ WR
ORJLQJ WR
'HOD\ VHQG ORJLQJ PHVVDJH OLOHV ORJJHG
ORJLQJ WR E\ WIWS
```

1.9.2

z

z

!

z

!

z

z

!

z

debugging 7

z

!

z

z

z

show logging config

!

logging on

-

!

logging count

-

i

logging console [level]

level

debugging 7

show logging config

i

logging rate-limit { number | **all** number | **console** {number | **all** number } } [**except** [severity]]

number 1~10000

all 0~7

console

except severity error(3) error

i

1

2

informational 6

3

50

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ ORJJLQJ FRXQW
5XLMLH FRQILJ ORJJLQJ FRQVROH LQIRUPDWLRQDO
5XLMLH FRQILJ ORJJLQJ UDWL OLPLW FRQVROH
```

show logging config

```
5XLMLH FRQILJ VKRZ ORJJLQJ FRQILJ
6\VORJ ORJJLQJ HQDEOHG
&RQVROH ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJ
ORQLWRU ORJJLQJ OHYHO GHEXJLQJ PHVVDJHV ORJJHG
%XIIHU ORJJLQJ OHYHO GHEXJLQJ PHVVDJHV ORJJHG
```

1
2
3

informational 6
50



!

z debugging 7

z

z **show logging config**

!

terminal monitor

-

terminal monitor

!

logging monitor [level

1

2

informational 6

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ ORJJLQJ PRQLWRU LQIRUPDWLRQDO
5XLMLH FRQILJ OLQH YW\
5XLMLH FRQILJ OLQH PRQLWRU
```

show logging config

```
6\VORJ ORJJLQJ HQDEOHG
&RQVROH ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJ
ORQLWRU ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
%XIIHU ORJJLQJ OHYHO GHEXJLQJ PHVVDJHV ORJJHG
)LOH ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
)LOH QDPH V\VORJBWHVW W[W VL]H .E\WHV KDYH ZULWWHC
6WDQGDUG IRUPDW IDOVH
7LPHVWDPS GHEXJ PHVVDJHV GDWHWLPH
7LPHVWDPS ORJ PHVVDJHV GDWHWLPH
6HTXHGFH QXPEHU ORJ PHVVDJHV HQDEOH
6\VQDPH ORJ PHVVDJHV HQDEOH
&RXQW ORJ PHVVDJHV HQDEOH
7UDS ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJH OLQHV ORJ
```

z

terminal no monitor

no terminal monitor

1.9.4

z

show logging

z

i

z

debugging 7

z

z **show logging config**

z **show logging**

i

logging buffered [buffer-size] [level]

buffer-size

level

debugging 7

show logging

i

1 128K 131072

2 informational 6

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ ORJLQJ EXIIHUG LQIRUPDWLRQDO
```

show logging

```
5XLMLH VKRZ ORJLQJ
6\VORJ ORJLQJ HQDEOHG
 &RQVROH ORJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJ
ORQLWRU ORJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
%XIIHU ORJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
)LOH ORJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
)LOH QDPH V\VORJBWHVW W[W VL]H .E\WHV KDYH ZULWWHC
6WDQGDUG IRUPDW IDOVH
```

1 128K 131072
2 informational 6

```
5XLMLH FRQILJXUH WHUPLQDO  
5XLMLH FRQILJ ORJJLQJ EXIIHUG LQIRUPDWLRQDO
```

show logging

```
7LPHVWDPS GHEXJ PHVVDJHV GDWHWLPH  
7LPHVWDPS ORJ PHVVDJHV GDWHWLPH  
6HTXHQFH QXPEHU ORJ PHVVDJHV HQDEOH  
6\VQDPH ORJ PHVVDJHV HQDEOH  
&RXQW ORJ PHVVDJHV HQDEOH  
7UDS ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJH OLOHV ORJ  
/RJ %XIIHU 7RWDO %\WHV KDYH ZULWWHQ  
-XQ 5XLMLH 6<6 &21),*B, &RQILJX  
FRQVROH  
-XQ 5XLMLH 6<6 &21),*B, &RQILJX  
FRQVROH  
VKRZ ORJJLQJ
```

1.9.5

z

z oob MGMT Syslog MGMT MGMT logging server
z

z

!

z

informational 6

z

!

z

RFC5424 RFC5424 RFC5424 local0 16 local7 23

z

!

z

IP

z

!

z

IP

z

z

show logging config

!

logging server [oob] ip-address [udp-prot port]

logging ip-address [udp-prot port]

oob MGMT

ip-address IP

udp-port port 514



5

u

!

logging trap [level]

level

informational 6

show logging config

i

logging facility facility-type

facility-type

RFC5424

local7 23

RFC5424

local0 16

i

logging source [interface] interface-type interface-number

interface-type

interface-number

IP

IP

IP

IP

IP

IP

IP

i

logging source ip ip-address

ip ip-address

IPV4

IPV4

Syslog Server

IP

IP

IP

IP

IP

IP

IP

i

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ ORJJLQJ VHUYHU
5XLMLH FRQILJ ORJJLQJ WUDS GHEXJJLQJ
5XLMLH FRQILJ ORJJLQJ VRXUFH LQWHUIDFH /RRSEDFN
```

show logging config

```
5XLMLH VKRZ ORJJLQJ FRQILJ
6\VORJ ORJJLQJ HQDEOHG
 &RQVROH ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJ
ORQLWRU ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
%XIIHU ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
)LOH ORJJLQJ OHYHO LQIRUPDWLRQDO PHVVDJHV ORJJHG
)LOH QDPH V\VORJBWHVW W[W VL]H .E\WHV KDYH ZULWWHC
6WDQGDUG IRUPDW IDOVH
7LPHVWDPS GHEXJ PHVVDJHV GDWHWLPH
7LPHVWDPS ORJ PHVVDJHV GDWHWLPH
6HTXHGFH QXPEHU ORJ PHVVDJHV HQDEOH
6\VQDPH ORJ PHVVDJHV HQDEOH
&RXQW ORJ PHVVDJHV HQDEOH
7UDS ORJJLQJ OHYHO GHEXJJLQJ PHVVDJH OLOHV ORJJHG
ORJJLQJ WR
```

1.9.6

z

z

1

ì

z

z

ì

z

z

!

z

z

!

z

z

z **show logging config**

!

logging file { **flash**:filename | **usb0**:filename | **usb1**:filename } [max-file-size] [level]

flash FLASH

usb0 USB0 1 USB USB

usb1 USB1 2 USB USB

filename txt

max-file-size 128K 6M bytes 128K

level

max-file-size max-file-size 128K

txt D:\X:\021\PLDPOyxxEup\TTs06\slil67og(e)3(s)]TJ/C2_0 1 Tf0 Tc08 T2 5.613 0 Td8>4B54

logging flash interval seconds

seconds FLASH 1~51840

ì

logging life-time level level days

level

days 7

filename **logging file flash** yyyy-mm-dd_filename_level.txt level
7 365

ì

logging flash flush

-



logging flash flush

ì

1 syslog
2 debugging 7
3 10 600

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ ORJJLQJ ILOH IODVK V\VORJ GHEXJJLQJ
5XLMLH FRQILJ ORJJLQJ IODVK LQWHUYDO
```

show logging config

```
5 XLMLH FRQILJ  VKRZ  ORJLQJ  FRQILJ  
6 \VORJ  ORJLQJ  HQDEOHG
```

z

z

ì

z

z

level level

no logging filter rule exact-match [**module** module-name **mnemonic** mnemonic-name **level** level]

no logging filter rule single-match [**level** level | **mnemonic** mnemonic-name | **module** module-name]

z / / Telnet/SSH
Log

z
Log

z logging userinfo logging userinfo command-log show running-config
logging userinfo command-log

ì /

z
z
ì
z
z

z show running

ì /

logging userinfo

-

/

Log

ì

logging userinfo command-log

-

Log

Log

i

1 /
2

5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ ORJJLOJ X VHULQIR
5XLMLH FRQILJ ORJJLOJ X VHULQIR FRPPDQG ORJ

z **show running**

i

logging synchronous

-

i

1

```
5XLMLH FRQILJXUH WHUPLQDO
5XLMLH FRQILJ OLOH FRQVROH
5XLMLH FRQILJ OLOH ORJLQJ V\QFKURQRXV
```

show running-config | begin line

```
5XLMLH VKRZ UXQQLQJ FRQILJ _ EHLQ OLOH
OLOH FRQ
ORJLQJ V\QFKURQRXV
ORJLQ ORFDO
```

vlan 0/1

vlan

```
5XLMLH FRQILJ YODQ
$XJ /,1. &+$1*(' ,QWHUIDFH *LJDELW(WKHUQHW
$XJ /,1(35272 83'2:1 /LOH SURWRFRO RQ ,QWHUIDF
WR XS
5XLMLH FRQILJ YODQ
```

1.10



clear

u

	clear logging

	show logging
	show logging config
	show logging count