

I G\$AJME

# ASME\_RGOS11.1(6)B24

V) %

of gyr^t^ )' (8

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

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

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

1.

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h

- 1.
- 2.
3. LINE
4. File System
5. SYS
- 6.
7. HTTP
8. LICENSING
9. PKG\_MGMT

---

# 1

|                              |  |
|------------------------------|--|
|                              |  |
| <a href="#">alias</a>        |  |
| <a href="#">privilege</a>    |  |
| <a href="#">show aliases</a> |  |

## 1.1 alias

**alias** *mode command-alias original-command*

**no alias** *mode [command-alias]*

### default

**default alias** *mode [command-alias]*

|                      |  |
|----------------------|--|
|                      |  |
| <i>mode</i>          |  |
| <i>command-alias</i> |  |

---

```
bgp          Configure bgp Protocol
config      gl ob le confi gure node
```

```
*command- alias=ori gi nal - command
EXEC        "s"  "show"  "s?"  's'
```

```
Ruijie#s?
*s=show show start-chat start-terminal-service
EXEC "sv"
```

**show version**

```
Ruijie#s?
*s=show *sv="show version" show start-chat
start-terminal-service
```

```
Ruijie# s?
show start-chat start-terminal-service
"ia" "ip address"
```

```
Ruijie(config-if)# a ?
A B C D IP address
dhcp IP Address via DHCP
Ruijie(config-if)# p address
ip address
```

**show aliases**

```
1 "def-route" "ip route 0.0.0.0 0.0.0.0 192.168.1.1"
Ruijie#configure terminal
Ruijie(config)#alias config def-route ip route 0.0.0.0 0.0.0.0 192.168.1.1
Ruijie(config)#def-route?
*def-route="ip route 0.0.0.0 0.0.0.0 192.168.1.1"
Ruijie(config)#end
Ruijie#show aliases config
gl ob le confi gure node alias:
def-route ip route 0.0.0.0 0.0.0.0 192.168.1.1
```

---

% Overly long alias name truncated after 19 characters.

255

% Command alias string too long

100

% Can't add more than 100 command aliases in single mode.

% Adding command alias fail.

-

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## 1.2 privilege

**privilege** *mode* [**all**] {**level** *level* / **reset**} *command-string*

**no privilege** *mode* [**all**] [**level** *level*] *command-string*

| <i>mode</i>               | CLI  |
|---------------------------|------|
| <b>all</b>                |      |
| <b>level</b> <i>level</i> | 0-15 |
| <b>reset</b>              |      |
| <i>command-string</i>     |      |

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**privilege**

CLI

**privilege ?**

CLI

| config       |      |
|--------------|------|
| ex c         |      |
| in er ace    |      |
| ip-dhcp-pool | DHCP |



---

1 EXEC

```
Ruijie#show aliases exec
```

```
exec node alias:
```

```
h help
```

```
p ping
```

```
s show
```

```
u undebug
```

```
un undebug
```

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## 2

|  |  |        |
|--|--|--------|
| <a href="#">&lt;1-99&gt;</a>               | Telnet Client                                  |        |
| <a href="#">banner exec</a>                |  |        |
| <a href="#">banner incoming</a>            | Telnet   |        |
| <a href="#">banner login</a>               |  |        |
| <a href="#">banner [motd]</a>              |  |        |
| <a href="#">banner prompt-timeout</a>      |  |        |
| <a href="#">banner slip-ppp</a>            | SLIP/PPP                                       |        |
| <a href="#">configure</a>                  |  |        |
| <a href="#">disable</a>                    |  |        |
| <a href="#">disconnect</a>                 | Telnet Client                                  |        |
| <a href="#">enable</a>                     |  |        |
| <a href="#">enable password</a>            |  |        |
| <a href="#">enable secret</a>              |  |        |
| <a href="#">enable service</a>             | SSH Server/Telnet Server/Web Server/Snmp Agent |        |
| <a href="#">end</a>                        |  |        |
| <a href="#">exec-banner</a>                | line   | EXEC   |
| <a href="#">exec-timeout</a>               | LINE   |        |
| <a href="#">exit</a>                       |  |        |
| <a href="#">help</a>                       |  |        |
| <a href="#">hostname</a>                   |  |        |
| <a href="#">ip telnet source-interface</a> | IP   | Telnet |
| <a href="#">lock</a>                       |  |        |
| <a href="#">lockable</a>                   | <b>lock</b>                                    |        |
| <a href="#">login</a>                      | AAA  |        |
| <a href="#">login access non-aaa</a>       | AAA  | AAA    |
| <a href="#">login local</a>                | AAA  |        |
| <a href="#">motd-banner</a>                | line   | MOTD   |
| <a href="#">password</a>                   | line   |        |
| <a href="#">prompt</a>                     |  |        |
| <a href="#">secret</a>                     | line   | MD5    |
| <a href="#">show debugging</a>             |  |        |
| <a href="#">show hostname</a>              |  |        |
| <a href="#">show line</a>                  |  |        |
| <a href="#">show reload</a>                |  |        |
| <a href="#">show running-config</a>        |  |        |
| <a href="#">show service</a>               |  |        |

---

[show sessions](#)

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## 2.2 banner exec

line  
**banner exec** *c message c*

**no banner exec**

| <i>c</i>       |  |
|----------------|--|
| <i>message</i> |  |

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MOTD **banner motd** LOGIN **banner login**  
EXEC **banner exec** incoming **banner**  
incoming Telnet incoming EXEC EXEC  
line line  
**no exec-banner**

1

Ruijie(config)# banner exec \$ \$

line

-

-

-

## 2.3 banner incoming

Telnet  
**banner incoming** *c message c*

---

telnet  
**no banner incoming**

|                |        |
|----------------|--------|
|                |        |
| <i>c</i>       | Telnet |
| <i>message</i> | Telnet |

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Telnet

MOTD **banner motd**

LOGIN

**banner login**

EXEC **banner exec**

incoming **banner incoming**

Telnet

incoming

EXEC

1

Telnet

Ruijie(config)# banner incoming \$ \$

Telnet

line

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## 2.4 banner login

**banner login** *c message c*

**no banner login**

|  |  |
|--|--|
|  |  |
|--|--|

---

|                |  |
|----------------|--|
| <i>c</i>       |  |
| <i>message</i> |  |

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|                 |                         |                         |       |                        |
|-----------------|-------------------------|-------------------------|-------|------------------------|
|                 | MOTD <b>banner motd</b> |                         | LOGIN | <b>banner login</b>    |
| <b>incoming</b> |                         | EXEC <b>banner exec</b> |       | incoming <b>banner</b> |
|                 | Telnet                  | incoming                |       | EXEC                   |

1

```
Ruijie(config)# banner login $ enter your password $
```

-

-

-

## 2.5 banner motd

```

MOTD message of the day
banner [motd] c message c
0-F a (t)
[motd]

```

|                 |      |                    |        |          |                    |                        |
|-----------------|------|--------------------|--------|----------|--------------------|------------------------|
|                 | MOTD | <b>banner motd</b> |        | LOGIN    |                    | <b>banner login</b>    |
| <b>incoming</b> |      |                    | Telnet | EXEC     | <b>banner exec</b> | incoming <b>banner</b> |
|                 |      |                    |        | incoming |                    | EXEC                   |





---

-

0

---

 **disable**

---

1

10

Ruijie# disable 10

**show privilege**

-

-

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## 2.10 disconnect

Telnet Client

**disconnect session-id**

| Telnet Client |               |
|---------------|---------------|
| session-id    | Telnet Client |

-

1

Telnet Client

Telnet Client

1

Telnet Client

Telnet Client

Ruijie# disconnect 1

1

**show sessions**

Telnet Client

---



---

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

**no enable password** [ **level** *level* ]

| <i>level</i>                |            |
|-----------------------------|------------|
| <i>0</i>                    |            |
| <i>password</i>             | EXEC 1~126 |
| <i>7 encrypted-password</i> |            |

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1 26





|  |            |
|--|------------|
| <b>web-server [ http   https   all ]</b> | Web Server |
| <b>snmp-agent</b>                        | Snmp Agent |

telnet-server snmp-agent web-server ssh-server

14

**no enable service**

|   |                           |       |                        |
|---|---------------------------|-------|------------------------|
|  | enable service web-server | 3     | [ http   https   all ] |
|   | all                       | http  | https http             |
|   | http https                | https |                        |

1 **enable service ssh-server** SSH Server

Ruijie(Config # enable service ssh-server

**show service**

-  
-  
-

**2.15 end**

**end**

|   |   |
|---|---|
| - | - |
|---|---|

-

0

end

```

1          end
Ruijie#con
Enter configuration commands, one per line. End with CNL/Z
Ruijie(config)#line vty 0
Ruijie(config-line)#end
*May 20 09:49:38 %SYS-5-CONFIG-I: Configured from console by console
Ruijie#

```

```

-
-
-
-

```

## 2.16 exec-banner

```

line EXEC
exec-banner

```

```

line EXEC
no exec-banner

```

|   |   |
|---|---|
| - | - |
|---|---|

EXEC

LINE

14

```

banner exec banner motd line EXEC MOTD
line EXEC MOTD no
EXEC MOTD

```

|   |                 |                 |        |
|---|-----------------|-----------------|--------|
|  | banner incoming | banner incoming | Telnet |
|   | incoming        | incoming        |        |

---

```

1          line 1
Ruijie(config)# line vty 1
Ruijie(config-line) no exec-banner

```

```

-
-
-

```

## 2.17 exec-timeout

```

LINE
exec-timeout minutes [ seconds ]

```

```

LINE
no exec-timeout

```

|                |           |
|----------------|-----------|
|                |           |
| <i>minutes</i> | 0-35791   |
| <i>seconds</i> | 0-2147483 |

10 min

```

LINE

```

```

14

```

```

LINE

```

```

1          line vty 0          5 30
Ruijie(config-line)# exec-timeout 5 30

```

```

-
-
-

```

---

## 2.18 exit

CLI

**exit**

| - | - |
|---|---|

-

0

-

1

**exit**

```
Ruijie#con
```

```
Enter configuration commands, one per line. End with CNIL/Z
```

```
Ruijie(config)#line vty 0
```

```
Ruijie(config-line)#end
```

```
*May 20 09:49:38: %SYS-5-CONFIG_I: Configured from console by console
```

```
Ruijie#con
```

```
Enter configuration commands, one per line. End with CNIL/Z
```

```
Ruijie(config)#line vty 0
```

```
Ruijie(config-line)#exit
```

```
Ruijie(config)#exit
```

```
*May 20 09:51:48: %SYS-5-CONFIG_I: Configured from console by console
```

```
Ruijie#exit
```

```
Press RETURN to get started
```

-

-

-

-

---

## 2.19 help

### help

|   |   |
|---|---|
| - | - |
|---|---|

-

1

"?"

1

Ruijie#help

Help may be requested at any point in a command by entering a question mark '?'. If nothing matches, the help list will be empty and you must backup until entering a '?' shows the available options.

Two styles of help are provided:

1. Full help is available when you are ready to enter a command argument (e.g. 'show?') and describes each possible argument.
2. Partial help is provided when an abbreviated argument is entered and you want to know what arguments match the input (e.g. 'show pr?').

2

Ruijie(config-if-GigabitEthernet 0/0) #?

Interface configuration commands:

|               |   |
|---------------|---|
| arp           | ARP interface subcommands               |
| bandwidth     | Set bandwidth informational parameter   |
| carrier-delay | Specify delay for interface transitions |
| dampening     | Enable event dampening                  |
| default       | Set a command to its defaults           |
| description   | Interface specific description          |
| dl dp         | Exec data link detection command        |

|                                     |   |              |
|-------------------------------------|---|--------------|
| duplex                              | Configure duplex operation                                  |              |
| efm                                 | Configure efm for an interface                              |              |
| end                                 | Exit from interface configuration mode                      |              |
| exit                                | Exit from interface configuration mode                      |              |
| expert                              | Expert extended ACL   |              |
| flowcontrol                         | Set the flow control value for an interface                 |              |
| full-duplex                         | Force full duplex operation                                 |              |
| global                              | Global ACL  |              |
| grp                                 | GVRP configure command                                      |              |
| half-duplex                         | Force half duplex operation                                 |              |
| help                                | Description of the interactive help system                  |              |
| ip                                  | Interface Internet Protocol configuration commands          | Intermediate |
| System- Intermediate System (IS-IS) |   |              |
| l2                                  | Configure L2 attribute                                      |              |
| label-switching                     | Enable interface process npls packet                        |              |
| lACP                                | LACP interface subcommands                                  |              |
| lldp                                | Link Layer Discovery Protocol                               |              |
| load-interval                       | Specify interval for load calculation for an interface      |              |
| mac                                 | Mac extended ACL  |              |
| mac-address                         | Set mac-address   |              |
| npls                                | Multi-Protocol Label Switching                              |              |
| mtu                                 | Set the interface Maximum Transmission Unit (MTU)           |              |
| no                                  | Negate a command or set its defaults                        |              |
| ntp                                 | Configure NTP   |              |
| port-group                          | Aggregate port/port bundling configuration                  |              |
| redirect                            | Redirect packets  |              |
| rmon                                | Rmon command  |              |
| security                            | Configure the Security                                      |              |
| show                                | Show running system information                             |              |
| shutdown                            | Shutdown the selected interface                             |              |
| snmp                                | Modify SNMP interface parameters                            |              |
| speed                               | Configure speed operation                                   |              |
| switchport                          | Set switching mode characteristics                          |              |
| vrf                                 | Multi-af VPN Routing/Forwarding parameters on the interface |              |
| vrrp                                | VRRP interface subcommands                                  |              |
| xconnect                            | Xconnect commands   |              |

3

```
Ruijie(config)#access-list 1 permit ?
A B C D Source address
any Any source host
```

---

```
host    A single source host
```

```
-  
-  
-  
-
```

## 2.20 hostname

```
hostname name
```

| name | 63 |
|------|----|

```
Ruijie
```

```
14
```

```
CHAP
```

```
1          BeiJing_Ruijie
```

```
Ruijie(config)# hostname BeiJing_Ruijie
```

```
BeiJing_Ruijie(config)#
```

```
-  
-  
-  
-
```

## 2.21 ip telnet source-interface

IP            Telnet  
**ip telnet source-interface** *interface-name*

| <i>interface-name</i> | Gi | Loopback | IP<br>null | Telnet<br>Tunnel | VLAN | AP |
|-----------------------|----|----------|------------|------------------|------|----|
| -                     |    |          |            |                  |      |    |

-

14

IP            Telnet            telnet            Telnet

**no ip telnet source-interface**

1            Loopback 1            IP            Telnet

Ruijie(config)# ip telnet source-interface Loopback 1

-

-

-

-

## 2.22 lock

**lock**

|   |   |
|---|---|
| - | - |
|---|---|

-

---

1

**lock**

Locked

line

**lockable**

line

1

```
Ruijie(config-line)# lockable
Ruijie(config-line)# end
Ruijie# lock
Password: <password>
Again: <password>
Locked
Password: <password>
```

-  
-  
-  
-

## 2.23 lockable

**lockable**

**no lockable**

| - | - |
|---|---|



---

LINE

14

AAA

VTY console

1 VTY

```
Ruijie(config)# no aaa new model
Ruijie(config)# line vty 0
Ruijie(config-line)# password 0 noratest
Ruijie(config-line)# login
```

-  
-  
-  
-

## 2.25 login access non-aaa

AAA LINE AAA  
**login access non-aaa**

AAA AAA  
**no login access non-aaa**

| - | - |
|---|---|

14

AAA

LINE

AAA

---

```

1          AAA          VTY
Ruijie(config)#log access non-aaa
Ruijie(config)#aaa new model
Ruijie(config)#line vty 0 4
Ruijie(config-line)#login local
Ruijie(config-line)#

```

```

-
-
-
-

```

## 2.26 login local

```

AAA          LINE
login local

```

```

no login local

```

|   |   |
|---|---|
| - | - |
|---|---|

```

-

```

```

LINE

```

```

14

```

```

AAA          LINE
username

```

```

1          VTY
Ruijie(config)#no aaa new model
Ruijie(config)#username test password 0 test
Ruijie(config)#line vty 0
Ruijie(config-line)#login local

```

-  
-  
-  
-

## 2.27 motd-banner

```
line MOTD
motd-banner
```

```
line MOTD
no motd-banner
```

|   |   |
|---|---|
| - | - |
|---|---|

MOTD

LINE

14

```
banner exec banner motd line EXEC MOTD
line EXEC MOTD
EXEC MOTD
```

```
▲ banner incoming banner incoming Telnet
incoming incoming
```

```
1 Vty1 MOTD
```

```
Ruijie(config)# line vty 1
Ruijie(config-line) no motd banner
```

-  
-

---

## 2.28 password

line  
**password** { [ 0 ] *password* | 7 *encrypted-password* }

line  
**no password**

| 0                           |      |      |
|-----------------------------|------|------|
| <i>password</i>             | line | 1~25 |
| 7 <i>encrypted-password</i> |      |      |

-

LINE

14

-

1 line red

```
Ruijie(config)# line vty 0
```

```
Ruijie(config-line)# password red
```

-

-

-

-

## 2.29 prompt

CLI  
**prompt** *string*

CLI

**no prompt**

|               |    |
|---------------|----|
|               |    |
| <i>string</i> | 32 |

-

14

CLI

CLI

EXEC

1

RGOS

Ruijie(config)# prompt RGOS

Ruijie(config)# end

RGOS

-

-

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-

## 2.30 secret

line MD5

**secret** { [ 0 ] *password* | 5 *encrypted-secret* }

line MD5

**no secret**

|                           |           |
|---------------------------|-----------|
|                           |           |
| <b>0</b>                  | MD5       |
| <i>password</i>           | line 1~25 |
| <b>5 encrypted-secret</b> | MD5       |

---

|  |  |
|--|--|
|  |  |
|--|--|

-

line

14

line

---

15

-

1 **show debugging**

```
Ruijie#show debugging
```

```
debug fw group detect intf-state
```

-

-

## 2.32 show hostname

**show hostname**

| - | - |
|---|---|

15

-

1 **show hostname**

Ruijie

```
Ruijie#show hostname
```

```
Ruijie
```

```
Ruijie#
```

-

-

## 2.33 show line

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

|                 |      |
|-----------------|------|
| <b>console</b>  |      |
| <b>vty</b>      |      |
| <i>line-num</i> | line |

14

-

1 console

```
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
```

|              |          |     |     |     |
|--------------|----------|-----|-----|-----|
| CON          | CON      | 0   | *   |     |
| Type         | CON      | AUX | TTY | VTY |
| speed        |          |     |     |     |
| Overruns     | overrun  |     |     |     |
| Line 0       |          |     |     |     |
| Location: "" | location |     |     |     |



---

## 2.35 show running-config

**show running-config [ interface *interface* ]**

| - | - |
|---|---|

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## 2.36 show service

**show service**

| - | - |
|---|---|

1

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1

```
Ruijie# show service
```

```
web-server(https): disabled
```

```
iB : e=
```





```

!
end
Ruijie (config-if-FastEthernet 0/1)#
2          interface range vlan 1-3
Ruijie(config-if-range)#show this

Building configuration...
!
interface VLAN 1
 ip address dhcp
interface VLAN 2
 ip address 1.1.1.1 255.255.255.0
interface VLAN 3
 ip address 3.3.3.3 255.255.255.0
!
end
Ruijie(config-if-range)#

```

-  
-

## 2.40 speed

**speed** *speed*

**no speed**

|              | bps  |       |       |       |        |      |
|--------------|------|-------|-------|-------|--------|------|
| <i>speed</i> | 9600 | 19200 | 38400 | 57600 | 115200 | 9600 |

9600

LINE

14

**speed**

---

1: 57600 bps

```
Ruijie(config)# line console 0
```

```
Ruijie(config-line)# speed 57600
```

**show line**      LINE

-  
-  
-

## 2.41 telnet

Telnet

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

|  | MGMT             | Telnet |
|--|------------------|--------|
| <b>oob</b>                             | MGMT             | Telnet |
| <i>host</i>                            | Telnet      IPV4 |        |
| <i>port</i>                            | Telnet      TCP  | 23     |
| <b>/source</b>                         | Telnet      IP   |        |
| <b>ip</b> <i>A.B.C.D</i>               | Telnet      IPV4 |        |
| <b>interface</b> <i>interface-name</i> | Telnet           |        |

-

1

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-

-

-

---

---

-  
-

## 2.42 username



7



7

7

```
1
Ruijie(config)# username test privilege 15 password 0 pw15
```

```
2
Ruijie(config)# username user1 web-auth password 0 pw
```

```
3
Ruijie(config)# username test permission rw /
```

```
4
Ruijie(config)# username test permission n /config text
Ruijie(config)# username test permission rwx /
```

-  
-  
-  
-

## 2.43 username import

**username import** *filename*

|                 |  |
|-----------------|--|
| <i>filename</i> |  |
|-----------------|--|

-

1

---

```
1 :  
Ruijie# username import user.csv
```

```
-  
-  
-  
-
```

## 2.44 username export

```
username export filename
```

| filename |  |
|----------|--|

```
-
```

```
1
```

```
1 :  
Ruijie# username export user.csv
```

```
-  
-  
-  
-
```

## 2.45 write

```
)
```

---

**write [**

### 3 LINE

|   |           |
|---|-----------|
| <a href="#">access-class</a>              | ACL IPv4  |
| <a href="#">accounting commands</a>       | line      |
| <a href="#">accounting exec</a>           | line      |
| <a href="#">authorization commands</a>    |           |
| <a href="#">authorization exec</a>        | Exec      |
| <a href="#">clear line</a>                |           |
| <a href="#">disconnect-character</a>      |           |
| <a href="#">escape-character</a>          |           |
| <a href="#">exec</a>                      | line      |
| <a href="#">history</a>                   | line line |
| <a href="#">length</a>                    |           |
| <a href="#">line</a>                      | LINE      |
| <a href="#">line vty</a>                  | VTY       |
| <a href="#">location</a>                  |           |
| <a href="#">monitor</a>                   |           |
| <a href="#">privilege level</a>           | line      |
| <a href="#">refuse-message</a>            | line      |
| <a href="#">show history</a>              | line      |
| <a href="#">show line</a>                 |           |
| <a href="#">show privilege</a>            | line      |
| <a href="#">show user</a>                 |           |
| <a href="#">speed</a>                     |           |
| <a href="#">terminal escape-character</a> |           |
| <a href="#">terminal history</a>          |           |
| <a href="#">terminal length</a>           |           |
| <a href="#">terminal location</a>         |           |
| <a href="#">terminal speed</a>            |           |
| <a href="#">terminal width</a>            |           |
| <a href="#">timeout login</a>             | line      |
| <a href="#">transport input</a>           | line      |
| <a href="#">vacant-message</a>            | line      |
| <a href="#">width</a>                     |           |

### 3.1 access-class

```

ACL IPv4
access-class { access-list-number | access-list-name } { in | out }

```

```

ACL IPV4
no access-class { access-list-number | access-list-name } { in | out }

```

|                           |  |
|---------------------------|--|
| <i>access-list-number</i> | ACL IP ACL(1-99 1300-1999) IP ACL(100-199 2000-2699) |
| <i>access-list-name</i>   | ACL  |
| <b>in</b>                 |  |
| <b>out</b>                |  |

-

LINE

14

-

```

1 0-5 VTY 20 ACL

```

```

Ruijie(config)# line vty 0 5
Ruijie(config-line)#access-class 20 in

```

```

2 6-7 VTY ACL test ACL

```

```

Ruijie(config)# line vty 6 7
Ruijie(config-line)#access-class test out

```

-

-

-

-

## 3.2 clear line

**clear line** { **console** *line-num* | **vty** *line-num* | *line-num* }

|                 |      |
|-----------------|------|
| <b>console</b>  |      |
| <b>vty</b>      |      |
| <i>line-num</i> | line |

14

**clear line**

1      LINE VTY 13                      VTY                      Telnet   SSH

```
Ruijie# clear line vty 13
```

-

-

-

-

## 3.3 disconnect-character



```

1      Vty 0                23(          (Ctrl+w))
Ruijie(config)# line vty 0
Ruijie(config-line)# escape-character 23

```

-  
-  
-  
-

### 3.5 exec

```

line
exec

```

```

line
no exec

```

|   |   |
|---|---|
| - | - |
|---|---|

LINE

14

```

line                                no exec

```

```

1      1
Ruijie(config)# line vty 1
Ruijie(config-line)# no exec
Ruijie# show users

```

| Line      | User | Hst(s) | Idle     | Location |
|-----------|------|--------|----------|----------|
| * 0 con 0 | ---  | idle   | 00:00:00 | ---      |
| 1 vty 0   | ---  | idle   | 00:01:03 | 20.1.1.2 |

```

3 vty 2      ---      i d l e      00 00 13  20 1. 1. 2
-
-
-
-

```

### 3.6 history

line line  
**history [ size size ]**

line  
**no history**

line  
**no history size**

|                  |       |
|------------------|-------|
| <b>size size</b> | 0~256 |
|------------------|-------|

10

LINE

14

-

1 0-5 line 20

```
Ruijie(config)# line vty 0 5
```

```
Ruijie(config-line)# history size 20
```

2 0-5 line

```
Ruijie(config)# line vty 0 5
```

```
Ruijie(config-line)# no history
```

-

-  
-  
-

### 3.7 length

**length** *screen-length*

**no length**

|                      |       |
|----------------------|-------|
| <i>screen-length</i> | 0-512 |
|----------------------|-------|

24

LINE

14

-

1 10

Ruijie(config-line)# length 10

-  
-  
-  
-

## 3.8 line

LINE

**line** [**console** | **vtty**] *first-line* [*last-line*]

|                   |            |
|-------------------|------------|
| <b>console</b>    |            |
| <b>vtty</b>       | Telnet SSH |
| <i>first-line</i> | first-line |
| <i>last-line</i>  | last-line  |

-

14

-

1 LINE VTY 1 3 LINE

Ruijie(config)# line vty 1 3

-

-

-

-

## 3.9 line vty

VTY

**line vty** *line-number*

VTY

**no line vty** *line-number*

|                    |     |      |
|--------------------|-----|------|
| <i>line-number</i> | VTY | 0~35 |
|--------------------|-----|------|

-

14

---

```
1                               Swtich's Line Vty 0
Ruijie(config)# line vty 0
Ruijie(config-line)# location Swtich's Line Vty 0
```

```
-
-
-
-
```

### 3.11 monitor

**monitor**

**no monitor**

| - | - |
|---|---|

```
-
```

LINE

14

```
-
```

```
1      0-5  line
Ruijie(config)# line vty 0 5
Ruijie(config-line)# monitor
```

```
-
-
-
```

-

### 3.12 privilege level

```
line
privilege level level
```

```
line
no privilege level
```

| <i>level</i> | 0-15 |
|--------------|------|

```
privilege level 1
```

```
LINE
```

```
14
```

-

```
1 0-4 VTY line 14
```

```
Ruijie(config)# line vty 0 4
```

```
Ruijie(config-line) privilege level 14
```

-

-

```
^
```

no refuse-message

|         |  |
|---------|--|
|         |  |
| c       |  |
| message |  |

-

LINE

14

1 line

Ruijie(config-line)# refuse-message @

-

-

-

-

### 3.14 show history

line  
show history

|   |   |
|---|---|
|   |   |
| - | - |

14

-

line

```
Ruijie# show history
exec:
sh privilege
sh run
show user
sh user all
show history
```

-  
-  
-  
-

### 3.15 show line

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

| <b>console</b>  |      |
|-----------------|------|
| <b>vty</b>      |      |
| <i>line-num</i> | line |

14

-

1 console

```
Ruijie# show line console 0
CON  Type  speed  Overruns
* 0   CON   9600   45927
Line 0 Location "", Type: "vt 100"
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
    
```

|       | CON | AUX | TTY | VTY |
|-------|-----|-----|-----|-----|
| CON   | CON | 0   |     | *   |
| Type  |     |     |     |     |
| speed |     |     |     |     |

```

-
line
Ruijie# show privilege
Current privilege level is 10

```

```

-

```

```

-

```

### 3.17 show users

```

show users [ all ]

```

| all |  |
|-----|--|

```

14

```

```

-

```

```

1

```

```

Ruijie# show users
Line          User          Hst(s)        Idle          Location
-----
 0 con 0      ---          idle          00:00:46      ---
 1 vty 0      ---          idle          00:00:29      20 1.1.2
* 2 vty 1      ---          idle          00:00:00      20 1.1.2

```

```

2

```

```

Ruijie(config)# show users all
Line          User          Hst(s)        Idle          Location
-----
 0 con 0      ---          idle          00:00:49      ---
 1 vty 0      ---          idle          00:00:32      20 1.1.2
* 2 vty 1      ---          idle          00:00:00      20 1.1.2
 3 vty 2      ---          idle          00:00:00      ---
 4 vty 3      ---          idle          00:00:00      ---

```



**terminal escape-character** *escape-value*

**terminal no escape-character**

| <i>escape-value</i> | ASCII | 0-255 |
|---------------------|-------|-------|

1 4 4 4 4 LINE

---

10

14

1

4

,

•

---

1 10

Ruijie# terminal length 10

-

-

-

-

### 3.22 terminal location

**terminal location** *location*

**terminal no location**

|                 |  |
|-----------------|--|
|                 |  |
| <i>location</i> |  |

-

14

-

1 Switch's Line Vty 0

Ruijie# terminal location Switch's Line Vty 0

-

-

-

-

### 3.23 terminal speed

79

14

-

1

10

Ruijie# terminal width 10

-

-

-

-

### 3.25 timeout login

line

**timeout login response** *seconds*

line

**no timeout login response**

| <b>response</b> | Line  |
|-----------------|-------|
| <i>seconds</i>  | 1-300 |

30

LINE

14

-

0-5 line Vty

300

```
Ruijie(config)# line vty 0 5
Ruijie(config-line)# timeout login response 300
```

```
-
-
-
-
```

## 3.26 transport input

```
line
transport input { all | ssh | telnet | none }
```

```
line
no transport input { all | ssh | telnet | none }
```

|               |        |
|---------------|--------|
| <b>all</b>    |        |
| <b>ssh</b>    | ssh    |
| <b>telnet</b> | telnet |
| <b>none</b>   |        |

all    ssh    telnet

LINE

14

```
-
```

0-4    VTY line            telnet

```
Ruijie(config)# line vty 0 5
Ruijie(config-line)# transport input ssh
```

```
-
-
```

---

-

-

### 3.27 vacant-message

line

**vacant-message** [ *c message c* ]

line

**no vacant-message**

| <i>c</i>       |  |
|----------------|--|
| <i>message</i> |  |

-

ag8 -7.07 -1.733 Td1 T

**no width**

|                     |       |
|---------------------|-------|
| <i>screen-width</i> | 0-256 |
|---------------------|-------|

79

LINE

14

-

1 10

Ruijie(config-line)# width 10

-

-

-

-

## 4 File System

|                                    |                   |           |     |     |
|------------------------------------|-------------------|-----------|-----|-----|
| <a href="#">cd</a>                 |                   |           |     |     |
| <a href="#">copy</a>               |                   |           |     |     |
| <a href="#">delete</a>             |                   |           |     |     |
| <a href="#">dir</a>                |                   |           |     |     |
| <a href="#">erase</a>              |                   |           |     |     |
| <a href="#">file</a>               |                   |           |     |     |
| <a href="#">file prompt</a>        |                   |           |     |     |
| <a href="#">mkdir</a>              |                   |           |     |     |
| <a href="#">more</a>               |                   |           |     |     |
| <a href="#">pwd</a>                |                   |           |     |     |
| <a href="#">rename</a>             |                   |           |     |     |
| <a href="#">rmdir</a>              |                   |           |     |     |
| <a href="#">show file systems</a>  |                   |           |     |     |
| <a href="#">show mount</a>         |                   |           |     |     |
| <a href="#">tar</a>                |                   | tar       | tar | tar |
| <a href="#">tftp-client source</a> | TFTP Client<br>IP |           | IP  | IP  |
| <a href="#">tree</a>               |                   |           |     |     |
| <a href="#">verify</a>             |                   |           | md5 |     |
| <a href="#">show disk</a>          |                   | usb/flash |     |     |

### 4.1 cd

`cd [ filesystem: ] [ directory ]`

|                    |     |                           |
|--------------------|-----|---------------------------|
| <i>filesystem:</i> | url | <b>flash:, usb:, tmp:</b> |
| <i>directory</i>   | /   |                           |

**flash:**



```
Ruijie#copy tftp://192.168.64.2/netconfig flash:/netconfig
The file [flash:/netconfig] exists, override it? [Y/N]: y
Copying !!!!!!!!

Accessing tftp://192.168.64.2/netconfig finished, 2399bytes prepared
Flushing data to flash:/netconfig..
Flush data done
```

**copy dir**

-

-

### 4.3 delete

**delete** [ *filesystem:* ] *file-url* [ **/force** | **/recursive** ]

|                    |     |                          |
|--------------------|-----|--------------------------|
| <i>filesystem:</i> | url | <b>flash: usb:, tmp:</b> |
| <i>file-url</i>    | /   |                          |
| <b>/force</b>      |     |                          |
| <b>/recursive</b>  |     |                          |

**flash:**

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G

1

\$



|                    |     |                          |
|--------------------|-----|--------------------------|
| <i>filesystem:</i> | url | <b>flash: usb:, tmp:</b> |
| <i>file-url</i>    | /   |                          |

**flash:**

15

-

1 flash

Ruijie#dir flash /

Directory of flash /

1 -rw 336 Jan 03 2012 18:53:42 fstab

2 -rw 4096 Jan 03 2012 12:32:09 rc.d

3 -rw 10485760 Jan 03 2012 18:13:37 rpmdb

3 files, 0 directories

10490192 bytes total (13192656 bytes free)

|             |                  |
|-------------|------------------|
| 1 2 3.      |                  |
| -rw-        | d<br>r<br>w<br>x |
| 10485760    |                  |
| rpmdb       |                  |
| files       |                  |
| directories |                  |
| total       |                  |
| fre         |                  |

-

-

-

-

## 4.5 erase

**erase filesystem:**

|                    |              |
|--------------------|--------------|
|                    |              |
| <i>filesystem:</i> | <i>usb0:</i> |

15

-

1 usb

Ruijie#erase usb0

Sure to erase usb0? [Y/N] y

Erasing disk usb0 ...

Erase disk usb0 done!

**erase dir**

-

-

-

## 4.6 file

**file** [*filesystem:*] *file-url*

|  |  |
|--|--|
|  |  |
|--|--|

|                    |     |                          |
|--------------------|-----|--------------------------|
| <i>filesystem:</i> | url | <b>flash: usb:, tmp:</b> |
| <i>file-url</i>    |     | /                        |

flash:

15

-

1 gcc

```
Ruijie#file flash:/gcc
```

```
/usr/bin/gcc-4.6 ELF 32-bit LSB executable, Intel 80386, version 1 (SYSV), dynamically linked (uses shared libs), for GNU/Linux 2.6.15, stripped
```

-

-

-

-

## 4.7 file prompt

file prompt [ noisy | quiet ]

|              |  |
|--------------|--|
|              |  |
| <b>noisy</b> |  |
| <b>quiet</b> |  |

**noisy**

15

-

1                   noisy

```
Ruijie#file prompt noisy
```

-

-

-

-

## 4.8 mkdir

**mkdir** [ *filesystem:* ] *directory*

```
filesystem:
```

```

2  -rw      4096   Jan 03 2012 12:32:09 rc.d
3  -rw  10485760   Jan 03 2012 18:13:37 rpmb
4  drw      4096   Jan 03 2012 18:13:37 newdir
3 files, 1 directories
10,494,228 bytes total (13,188,560 bytes free)

```

```

-
-
-
-

```

## 4.9 more

`more [ /ascii | /binary ] [ filesystem: ] file-url`

|                          |                               |
|--------------------------|-------------------------------|
| <code>/ascii</code>      | ASCII                         |
| <code>/binary</code>     | 16 /                          |
| <code>filesystem:</code> | url <b>flash:, usb:, tmp:</b> |
| <code>file-url</code>    | /                             |

```

15

```

```

-

```

```

1  flash          netconfig

```

```

Ruijie#more flash:/netconfig
#
# The network configuration file. This file is currently only used in
# conjunction with the TI-RPC code in the libtirpc library.
#
# Entries consist of:
#

```

```

# <network_id> <servants> <flags> <protocol> <protocol> \
# <device> <network_interfaces>
#
# The <device> and <network_interfaces> fields are always empty in this
# implementation.
#
udp      tpi_clts      v   inet    udp      -      -
tcp      tpi_cots_ord  v   inet    tcp      -      -
udp6     tpi_clts      v   inet6   udp      -      -
tcp6     tpi_cots_ord  v   inet6   tcp      -      -
rawip    tpi_raw       -   inet    -        -      -
local    tpi_cots_ord  -   loopback -        -      -

```

-  
-  
-  
-

## 4.10 pwd

**pwd**

|   |   |
|---|---|
| - | - |
|---|---|

-  
  
14  
  
-  
  
-  
  
-

-

-

-

## 4.11 rename

**rename** *src-url dst-url*



-  
-  
-  
-

## 4.12 rmdir

**rmdir** [ *filesystem:* ] *directory*

|                    |            |               |
|--------------------|------------|---------------|
|                    | @ <i>f</i> |               |
| <i>filesystem:</i> | url        | <b>flash:</b> |

```
2 -rw      4096 Jan 03 2012 12:32:09 rc.d
3 -rw  10485760 Jan 03 2012 18:13:37 rpmb
3 files, 0
```



|                          |   |
|--------------------------|---|
| on                       | - |
| /proc                    |   |
| type                     | - |
| proc                     |   |
| (rw,noexec,nosuid,nodev) |   |

---

14

-

1 TFTP Client IP 192.168.23.236

```
Ruijie(config)# tftp-client source ip 192 168 23 236
```

2 TFTP Client IP 2003:0:0:0::2

```
Ruijie(config)# tftp-client source ipv6 2003 0 0 0 : 2
```

3 TFTP Client IP gigabitEthernet 0/0

```
Ruijie(config)# tftp-client source gigabitEthernet 0/0
```

5 no IP

```
Ruijie(config)# no tftp-client source ip 192 168 23 236
```

7 TFTP Client

```
Ruijie(config)# default tftp-client source ip 192 168 23 236
```

1 show run tftp-client source ip192.168.23.236

2 show run tftp-client source ipv6 2003:0:0:0::2

3 show run tftp-client source gigabitEthernet 0/0

1 ip

2

-

-

## 4.16 tree

**tree** [*filesystem:*] [*directory*]

b-T@.Ÿ.107697ADP(R450)0 0678e Tf ,2 Tc 4.1w 13.98 0 073 0.06 5533 1 Tf tmp:0 -1.8 TD <6FAC05400

---

```

| +- echo_server.o
| +- echo_sysfs.c
| +- echo_sysfs.h
| +- echo_sysfs.o
| +- Makefile
| +- modules.order
| +- Module.symvers
| +- ns_gfd.c
| +- ns_gfd.o
+- readme
+- server_module
+- server_userspace
+- sys_rgos.ko
+- user_space
  +- echo_server.c
  +- echo_server.o
  +- Makefile
  +- ns_gfd.c
  +- ns_gfd.o 10,490,132 bytes total (13,192,656 bytes free)

```

-  
-  
-  
-

## 4.17 verify

md5

**verify** [ /md5 md5-value ] filesystem: [ file-url ]

|                    |     |                          |
|--------------------|-----|--------------------------|
|                    |     |                          |
| <b>/md5</b>        | MD5 |                          |
| <b>md5-value</b>   | md5 | md5                      |
| <b>filesystem:</b> | url | <b>flash: usb:, tmp:</b> |
| <b>file-url</b>    | /   |                          |

**flash:**





## 5 SYS

|   |       |
|---|-------|
| <a href="#">calendar set</a>              |       |
| <a href="#">clock read-calendar</a>       |       |
| <a href="#">clock set</a>                 |       |
| <a href="#">clock summer-time</a>         |       |
| <a href="#">clock timezone</a>            |       |
| <a href="#">clock update-calendar</a>     |       |
| <a href="#">cpu high-watermark set</a>    | CPU 0 |
| <a href="#">memory low-watermark set</a>  |       |
| <a href="#">memory history clear</a>      |       |
| <a href="#">reload</a>                    |       |
| <a href="#">show calendar</a>             |       |
| <a href="#">show clock</a>                |       |
| <a href="#">show health-monitor</a>       |       |
| <a href="#">show memory</a>               |       |
| <a href="#">show pci-bus</a>              | PCI   |
| <a href="#">show process cpu</a>          |       |
| <a href="#">show process cpu detailed</a> |       |
| <a href="#">show usb-bus</a>              | USB   |
| <a href="#">show version</a>              |       |
| <a href="#">show cpu</a>                  |       |

1

1.

*month*    *day*    *year*

2012-02-29 09:33:44

**calendar set 12 5**

2012-05-29 12:33:44

2.

*day*    1~31

2012    2    29

2    31

**calendar set 11:30 2 31 2012**

2012-03-02 11:30:23



1

1.

*month*    *day*    *year*





```

Ruijie(config)#show calendar
08:24:35 GMT Wed, Feb 29, 2012

Ruijie(config)#clock summer-time TZA start Feb 1 sat 2:00 end May 3 Monday 18:30 ahead 1:20
*May 10 03:45:58 %SYS-5-CLOCKUPDATE: Set summer-time: TZA from February the 1st Saturday at 2:00
TO May the 3rd Monday at 18:30 ahead 1 hour 20 minute
Set summer-time: TZA from February the 1st Saturday at 2:00 TO May the 3rd Monday at 18:30 ahead
1 hour 20 minute

Ruijie#show clock
18:00:08 TZA Wed, Feb 29, 2012

#
#
Ruijie#clock set 18:11
*Jan 1 18:00:09 %SYS-5-CLOCKUPDATE: Set systemclock: 18:00:09 ABC Sun, Jan 1, 2012
Set systemclock: 18:00:09 ABC Sun, Jan 1, 2012
Ruijie#show clock
18:00:12 ABC Sun, Jan 1, 2012

```

```

2
4
1
2:00
10
ahead
ahead
2:00
1

```

```

Ruijie(config)#clock summer-time PDT start April 1 sunday 2:00 end October last Sunday 2:00
*May 10 03:15:05 %SYS-5-CLOCKUPDATE: Set summer-time: PDT from April the 1st Sunday at 2:00 TO October
the last Sunday at 2:00 ahead 1 hour
Set summer-time: PDT from April the 1st Sunday at 2:00 TO October the last Sunday at 2:00 ahead 1
hour

```

3

```

Ruijie(config)#no clock summer-time
*Jan 1 18:01:09 %SYS-5-CLOCKUPDATE: Set no summer time.
Set no summer time.


```

ÿ

## 5.5 clock timezone

**clock timezone** [ *name* *hours-offset* [ *minutes-offset* ] ]

**no clock timezone**

|                       |   |                       |
|-----------------------|---|-----------------------|
| <i>name</i>           | [A~Z][a~z]  | 3~31                  |
| <i>hours-offset</i>   | UTC   | <i>hours-offset</i>   |
|                       | [ -12, 12 ]   |                       |
|                       |  UTC | <i>hours-offset</i> - |
| <i>minutes-offset</i> |   | 0~59                  |

15

-

vsd0

vsd

1 CST 8

```
Ruijie(config)# clock timezone CST 8
```

```
Set time zone name: CST (GMT+08:00)
```

```
Ruijie# show clock
```

```
18:00:17 CST Wed, Dec 5, 2012
```

2 TZA 06:13

```
Ruijie(config)# clock timezone TZA -6 13
```

```
Set time zone name: TZA (GMT-06:13)
```

3

```
Ruijie(config)# no clock timezone
```

```
Set no clock timezone.
```

-

-  
-  
-

## 5.6 clock update-calendar

### clock update-calendar

|   |   |
|---|---|
| - | - |
|---|---|

-

1

vsd0

vsd

1

```
Ruijie# clock update-calendar
Set the hardware time from the system clock.
```

2

GMT+5:10

5:10

```
Ruijie# show clock
09:30:21 TSZ Wed, Feb 29, 2012
```

```
Ruijie# clock update-calendar
Set the hardware time from the system clock.
```

```
Ruijie# show calendar
04:20:25 UTC Wed, Feb 29, 2012
```

3

GMT+5:10

2 1 1

6 1 2

1 15

6:25

```

Ruijie# show clock
09:30:02 TSZ Wed, Feb 29, 2012

Ruijie# clock update-calendar
Set the hardware time from the system clock.

Ruijie# show calendar
03:05:08 UTC Wed, Feb 29, 2012

```

-  
-  
-  
-

## 5.7 cpu high-watermark set

CPU

**cpu high-watermark set** [ [ **high** *high-value* ] [ **range** *range-value* ] ]

CPU

**no cpu high-watermark set**

**default cpu high-watermark set**

|                                 | CPU | 2~99 |
|---------------------------------|-----|------|
| <b>high</b> <i>high-value</i>   |     |      |
| <b>range</b> <i>range-value</i> |     | 1~20 |

CPU            80%            5%    75%~85%

15

vsd0  
CPU

vsd

CPU

1 CPU

```
Ruijie(config)# default cpu high-watermark set
Reset default cpu watermark monitor
set systemcpu watermark high 80%(75%-85%)
```

2 CPU

```
Ruijie(config)# no cpu high-watermark set
Close cpu watermark monitor
```

3

```
Ruijie(config)# cpu high-watermark set
Open cpu watermark monitor
set systemcpu watermark high 80%(75%-85%)
```

4

```
88% 3%
Ruijie(config)# cpu high-watermark set high 88 range 3
Open cpu watermark monitor
set systemcpu watermark high 88%(85%-91%)
88% 91% 88%+3% 85% 88%-3%
```

-

```
CPU 85%~91% CPU
```

```
*Jan 19 16:23:01: %RG_SYSMON-4-CPU_WATERMARK_HIGH warning! systemcpu usage above high watermark(85%), current cpu usage 100%
```

CPU

```
*Jan 20 07:02:52: %RG_SYSMON-5-CPU_WATERMARK withdraw warning! systemcpu usage below high watermark(85%), current cpu usage 36%
```

-

-

## 5.8 memory low-watermark set

**memory low-watermark set** *mem-rate*

no memory low-watermark set

default memory low-watermark set

| <i>mem-rate</i> | 1~100 | % |
|-----------------|-------|---|

90%

15

1 80%

Ruijie(config)#memory low watermark set 80

-

-

-

## 5.9 memory history clear

memory history clear [ one-forth | half | all ]

| <b>one-forth</b> |  |
|------------------|--|
| <b>half</b>      |  |
| <b>all</b>       |  |

-

---

15

-

1

```
Ruijie# show memory history
```

```
Time Thu Jan 1 00:24:45 1970
```

```
Used(k) 148516
```

```
Maximum memory users for this period
```

```
Process Name    Holding
```

```
tcpip.elf       270028
```

```
cli-memory      60600
```

```
rg_syslogd      36640
```

```
Time Thu Jan 1 00:24:41 1970
```

```
Used(k) 148492
```

```
Maximum memory users for this period
```

```
Process Name    Holding
```

```
tcpip.elf       270028
```

```
cli-memory      52408
```

```
rg_syslogd      36640
```

```
Time Thu Jan 1 00:24:41 1970
```

```
Used(k) 148444
```

```
Maximum memory users for this period
```

```
Process Name    Holding
```

```
tcpip.elf       270028
```

```
cli-memory      44088
```

```
rg_syslogd      36640
```

```
Ruijie(config)# memory history clear half
```

```
2 out of 5 records in the history table to be cleared..
```

```
Clear done!
```

-

-

-

-

## 5.10 reload

**reload** [ at { *hour* [ :*minute* [ :*second* ] ] } [ h

-

## 5.11 show calendar

show calendar

|   |   |
|---|---|
| - | - |
|---|---|

1

-

1

Ruijie# show calendar  
21: 57: 48 GMT Sun, Feb 28, 2012

-

-

## 5.12 show clock

show clock

|   |   |
|---|---|
| - | - |
|---|---|

1

-

1

Ruijie# show clock  
18 22: 20 UTC Tue, Dec 11, 2012

2

```
Ruijie# show clock
03:07:49 TSZ Wed, Feb 29, 2012
```

-

-

## 5.13 show memory

**show memory** [ **sorted total** | **history** | **low-watermark** | *process-id* | *process-name* ]

| <b>sorted total</b>  |                     |
|----------------------|---------------------|
| <b>history</b>       |                     |
| <b>low-watermark</b> |                     |
| <i>process-id</i>    | <i>process-id</i>   |
| <i>process-name</i>  | <i>process-name</i> |

15

**show memory history**

10

**memory history clear**

1

```
Ruijie# show memory sorted
System Memory: 508324K total, 481560K used, 26764K free, 348200K available, 50.5% used rate
Swap: 128000K total, 128000K free
Used detail: 149112K active, 247776K inactive, 30460K mapped, 50460K slab, 3752K others
```

| PID  | Text (K) | Rss (K) | Data (K) | Stack (K) | Total (K) | Process         |
|------|----------|---------|----------|-----------|-----------|-----------------|
| 807  | 1568     | 4584    | 264728   | 84        | 270028    | tcpip elf       |
| 854  | 40       | 1436    | 246076   | 84        | 248840    | cli-file system |
| 1237 | 52       | 1492    | 123260   | 84        | 126036    | cli-memory      |
| 803  | 56       | 1104    | 74064    | 84        | 76920     | ping elf        |
| 727  | 84       | 1276    | 33812    | 84        | 36640     | rg_syslogd      |
| 733  | 84       | 796     | 33536    | 84        | 36364     | rg_syslogd      |

```

776    224    1416    16896      84    19800      lsndemo
858    40     1324    16844      84    19612      rg-tty-admin
769    40     3600    11052      84    13812      skbdemo
-- More --

```

|           |   |
|-----------|---|
|           |   |
| total     |   |
| used      |   |
| free      |   |
| available |   |
| used rate |   |
| Swap      |   |
| Active    |   |
| inactive  |   |
| mapped    |   |
| slab      | Slab  |
| others    | Used      active   inactive   mapped   slab |

|         |  |
|---------|--|
|         |  |
| PID     |  |
| Text    |  |
| Rss     |  |
| Data    |  |
| Stack   |  |
| Total   |  |
| Process |  |

-

-

## 5.14 show memory vsd

---

**show memory vsd** *vsd\_id*

| <i>vsd_id</i> | vsd        | show vsd |
|---------------|------------|----------|
|               | vsd vsd id | [0 16]   |

15

```

1340 1084 4700 1024 84 10928 l dp elf
1339 288 17684 556 84 21472 nsf.elf
1338 208 3604 42712 84 47708 rg-syslogd
--More--

```

-

-

## 5.15 show pci-bus

```

PCI
show pci-bus

```

| - | - |
|---|---|

1

-

```

1 PCI
Ruijie# show pci-bus
NO 0

```

```

Vendor ID      : 0x1131
Device ID     : 0x1561
Domain bus: dev. func : 0000.00.05.0
Status / Command : 0x210000
Class / Revision : 0xc031030
Latency       : 0x0

```

first 64 bytes of configuration address space:

```

00: 31 11 61 15 00 00 10 02 30 10 03 0c 20 00 80 00
10: 00 00 00 f0 00 00 00 00 00 00 00 00 00 00 00 00
20: 00 00 00 00 00 00 00 00 00 00 00 00 31 11 61 15
30: 00 00 00 00 dc 00 00 00 00 00 00 00 29 01 01 2a

```

NO 1

```

Vendor ID      : 0x1131

```

```

Device ID          : 0x1562
Dnair bus: dev. func : 0000 00 05 1
Status / Command   : 0x2100156
Class / Revision   : 0xc032030
Latency            : 0x30
First 64 bytes of configuration address space:
00: 31 11 62 15 56 01 10 02 30 20 03 0c 20 30 80 00
10: 00 10 00 f0 00 00 00 00 00 00 00 00 00 00 00 00
20: 00 00 00 00 00 00 00 00 00 00 00 00 31 11 62 15
30: 00 00 00 00 dc 00 00 00 00 00 00 00 29 01 02 10

```

-

-

## 5.16 show processes cpu

```
show processes cpu [ history [ table ] ] [ [ 5sec | 1min | 5min | 15min ] [ nonzero ] ]
```

|                                   | 5   | 1 | 5 | 15 | CPU |    |
|-----------------------------------|-----|---|---|----|-----|----|
| <b>5sec   1min   5min   15min</b> |     |   |   |    |     |    |
| <b>nonzero</b>                    | CPU |   |   |    |     |    |
| <b>history</b>                    |     |   |   | 60 | 60  | 72 |
|                                   | cpu |   |   |    |     |    |

```
Tasks Statistics: 375 total, 10 running, 365 sleeping, 0 stopped, 0 zombie
```

```

Pid Vsd S PRI P 5Sec 1Mn 5Mn 15Mn Process
  1 0 S 20 0 0.0(0.0) 0.0(0.0) 0.0(0.0) 0.0(0.0) init
  2 0 S 20 1 0.0(0.0) 0.0(0.0) 0.0(0.0) 0.0(0.0) kthreadd
  3 0 S -100 0 0.0(0.0) 0.0(0.0) 0.0(0.0) 0.0(0.0) migration/0
  4 0 S 20 0 0.0(0.0) 0.0(0.0) 0.0(0.0) 0.0(0.0) ksoftirqd/0
  5 0 S -100 1 0.0(0.0) 0.0(0.0) 0.0(0.0) 0.0(0.0) migration/1

```

```
--More--          ID          15          CPU          0
```

```
Ruijie# show processes cpu nonzero
```

|                   |           |
|-------------------|-----------|
| System Uptime     |           |
| CPU Utilization   | 5 1 5 CPU |
| Virtual CPU usage | 5 1 5 CPU |
| Tasks Statistics  |           |
| set system cpu    | watermark |

|          |  |
|----------|--|
| running  |  |
| sleeping |  |
| stopped  |  |

3 ID 15 CPU .

Ruijie #show processes cpu nonzero

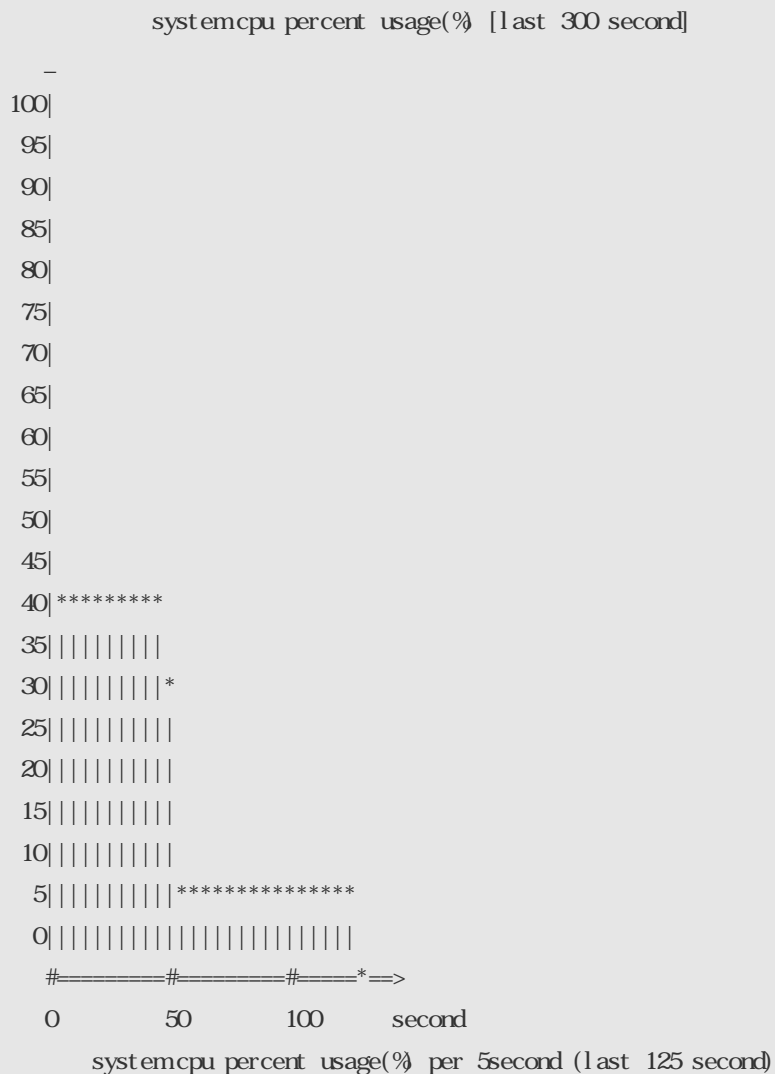
4 5 CPU 1sec CPU

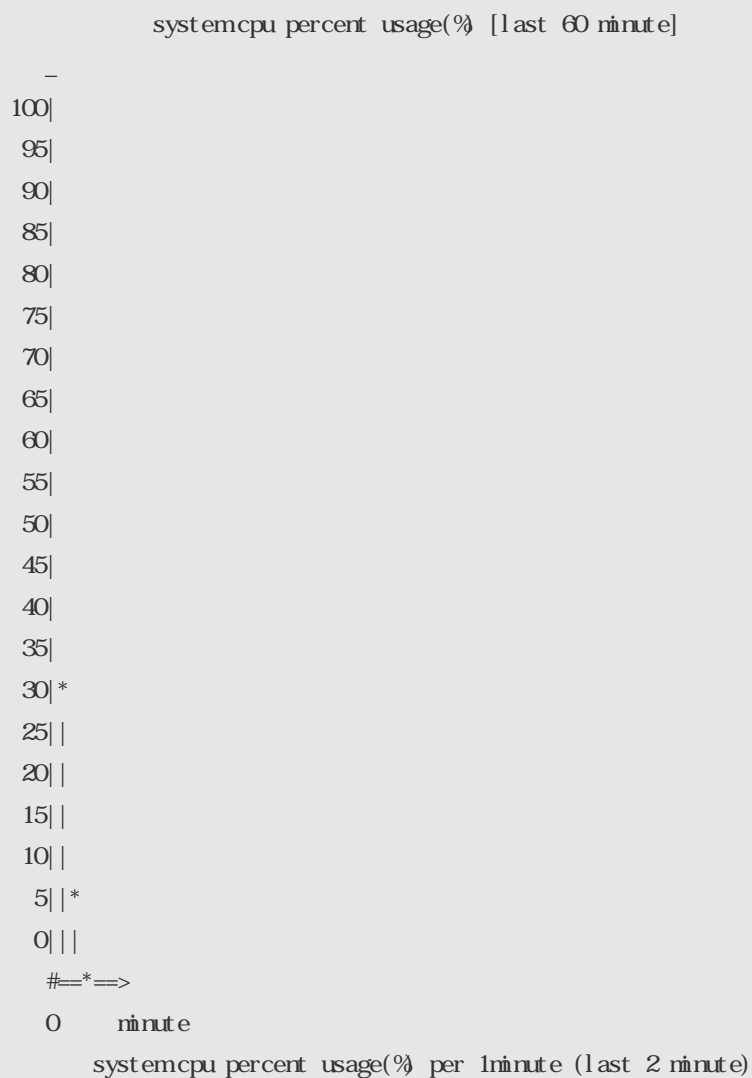
Ruijie #show processes cpu 5sec nonzero

```

5
      cpu          60    60    72
      300          cpu          5          5%
*
      cpu          0          5    cpu
%
      60          cpu          %          1
      72          cpu          %          1
  
```

Ruijie#show processes cpu history





|   |     |     |     |    |    |   |
|---|-----|-----|-----|----|----|---|
| 6 | cpu | 0   | 60  | 60 | 72 |   |
|   | 300 |     | cpu |    |    | 5 |
| % | 5   |     |     |    |    |   |
|   | 60  | cpu |     | %  |    | 1 |
|   | 72  | cpu |     | %  |    | 1 |

```

Ruijie #show processes cpu history table
      systemcpu percent usage(%) [last 300 second]
#-----#
|      | 1| 2| 3| 4| 5| 6| 7| 8| 9| 10|

```

```

#-----#
#-----#
|    0|  2 0|  2 4|  2 3|  2 3|  2 8|  3 0|  2 7|  3 2|  2 6|  2 4|
#-----#
|    1|  2 7|  2 5|  2 7|  2 2|  2 4|  2 6|  2 2|  2 7|  2 3|  2 5|
#-----#
|    2|  2 9|  2 0|  2 4|  2 5|  2 7|  2 4|  2 4|  2 6|  2 6|  2 5|
#-----#
|    3|  2 7|  2 8|  2 8|  3 2|  2 5|  3 2|  3 1|  4 0|  2 7|  2 7|
#-----#
|    4|  4 0|  2 3|  2 1|  2 2|  2 7|  2 4|  2 5|  2 6|  2 4|  2 6|
#-----#
|    5|  2 4|  3 2|  2 5|  2 3|  2 3|  3 6|  2 8|  2 5|  2 2|  2 4|
#-----#

          systemcpu percent usage(%) [last 60 minute]
#-----#
|      |  1|  2|  3|  4|  5|  6|  7|  8|  9| 10|
#-----#
#-----#
|      |  0|  2 6|  2 5|  3 0|  2 4|  2 6|
#-----#

```

```

7          5          cpu          CPU
CPU          5          cpu          5          CPU          TOP5          CPU
          cpu high-watermark set

```

```

1970-01-07 01:51:31  system(10.8%) ssa_process(9.1%) ssd_process(0.6%) rg-sysnon(0.3%)
ssc_process(0.3%) han(0.3%)
1970-01-07 01:56:45  system(10.9%) ssa_process(9.1%) ssd_process(0.6%) han(0.3%)
ssc_process(0.3%) rg-sysnon(0.3%)
1970-01-07 02:01:58  system(11.0%) ssa_process(9.1%) ssd_process(0.7%) rg-sysnon(0.4%)
ssc_process(0.3%) han(0.3%)
1970-01-07 02:07:11  system(11.0%) ssa_process(9.1%) ssd_process(0.7%) rg-sysnon(0.4%)
han(0.3%) ssc_process(0.3%)
1970-01-07 02:12:24  system(11.0%) ssa_process(9.1%) ssd_process(0.7%) rg-sysnon(0.4%)
ssc_process(0.3%) han(0.3%)
1970-01-07 02:17:37  system(11.0%) ssa_process(9.0%) ssd_process(0.6%) rg-sysnon(0.4%)
han(0.3%) ssc_process(0.3%)

```

-

-

## 5.17 show processes cpu detailed

**show processes cpu detailed** { *process-id* | *process-name* }

| <i>process-id</i>   | ID |
|---------------------|----|
| <i>process-name</i> |    |

15

vsd0

vsd

1

```
Ruijie# show processes cpu detailed demo
```

```
Process Id   : 1820
```

```
Process Name : demo
```

```
Vsdi d      : 0
```

```
Process Ppi d : 1
```

```
State       : R(running)
```

```

On CPU      : 0
Priority    : 20
Age Time   : 24:06.5
Run Time   : 00:01.0
Cpu Usage  :
  Lass 5 sec   0.3% 0.6%
  Lass 1 min   0.3% 0.6%
  Lass 5 min   0.3% 0.6%
  Lass 15 min  0.3% 0.6%
Tty        : ?
    
```

 Code Usage : 209.6KB.

```

Ruijie# show processes cpu detailed demo
duplicate process, choose one by id not name.
name: demo, id: 1089, state: S(sleeping)
name: demo, id: 1091, state: R(running)
process name: monitor_procs, do NOT exist, or NOT only one.
    
```

|              |   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
|--------------|---|---|---|----|-----|------|-----|--|--|---|---|--|--|-----|------|--|------|--|--|--|--|------|
| Process Id   | ID  |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Vsdid        | vsd   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Process Name |   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Process Ppid | ID  |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| State        |   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| On CPU       | CPU   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Priority     |   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Age Time     |   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Run Time     |   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Cpu Usage    | <table border="0"> <tr> <td></td> <td>5</td> <td>1</td> <td>5</td> <td>15</td> <td>CPU</td> <td></td> </tr> <tr> <td></td> <td>0</td> <td>0</td> <td></td> <td></td> <td>cpu</td> <td>demo</td> </tr> <tr> <td></td> <td>0.6%</td> <td></td> <td></td> <td></td> <td></td> <td>0.3%</td> </tr> </table> |   | 5 | 1  | 5   | 15   | CPU |  |  | 0 | 0 |  |  | cpu | demo |  | 0.6% |  |  |  |  | 0.3% |
|              | 5   | 1 | 5 | 15 | CPU |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
|              | 0   | 0 |   |    | cpu | demo |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
|              | 0.6%  |   |   |    |     | 0.3% |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Tty          | Tty 0 ?   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |
| Code Usage   |   |   |   |    |     |      |     |  |  |   |   |  |  |     |      |  |      |  |  |  |  |      |

```

2 ID
Ruijie# show process cpu detailed 1715
    
```

-

## 5.18 show usb-bus

USB  
show usb-bus

| - | - |
|---|---|

1

-

1 USB

```
Ruijie# show usb-bus
Device: Linux Foundation 2.0 root hub
Bus 001 Device 001: ID 1d6b:0002
```

-

-

## 5.19 show version

show version

| - | - |
|---|---|

1

-

1

---

```
Ruijie# show version
```

```
System description : Ruijie Indoor AP320-I (802.11a/n and 802.11b/g/n) By Ruijie Networks
```

```
System start time : 2012-12-06 00:00:00
```

```
System uptime : 0 03 20 07
```

```
System hardware version : 1.0.0
```

```
System software version : AP_RCS11.0(1B1)
```

```
System serial number : 1234942570018
```



---

## 6

|  |                 |
|--|-----------------|
| <a href="#">bandwidth</a>                                    |                 |
| <a href="#">carrier-delay</a>                                |                 |
| <a href="#">clear counter</a>                                | clear counters  |
| <a href="#">clear interface</a>                              | clear interface |
| <a href="#">description</a>                                  | description     |
| <a href="#">duplex</a>                                       |                 |
| <a href="#">interface</a>                                    |                 |
| <a href="#">interface range</a>                              |                 |
| <a href="#">load-interval</a>                                |                 |
| <a href="#">logging</a>                                      | syslog          |
| <a href="#">media-type</a>                                   |                 |
| <a href="#">mtu</a>  | mtu             |
| <a href="#">show interfaces</a>                              |                 |
| <a href="#">show interfaces link-state-change statistics</a> |                 |
| <a href="#">show interfaces status</a>                       |                 |
| <a href="#">show vlans</a>                                   | VLAN            |
| <a href="#">shutdown</a>                                     | shutdown        |
| <a href="#">speed</a>  | speed           |

### 6.1 bandwidth

**bandwidth** *kilobits*

**no bandwidth** *kilobits*

---

14

**bandwidth**

Link

Bandwidth

```
1                               64Kbps
Ruijie(config)# interface gigabitEthernet 0/1
Ruijie(config-if-GigabitEthernet 0/1)# bandwidth 64
```

-  
-  
-  
-

## 6.2 carrier-delay

**carrier-delay** {[milliseconds] num | up [milliseconds] num down [milliseconds] num}

**no carrier-delay**

```
m ]|$%g85jWK#6)7b1DGCpqNA0- i
```

---

DCD  
DCD  
DCD

1

5

```
Ruijie(config)# interface GigabitEthernet 1/1  
Ruijie(config-if-GigabitEthernet 1/1)# ca/
```

6.4 clear

ernet 1/1

ce-number



---

14

**show interfaces**

```
1 GigabitEthernet 1/1
Ruijie(config)# interface GigabitEthernet 1/1
Ruijie(config-if-GigabitEthernet 1/1)# duplex full
```

1 **show interfaces**

```
1. Down Up Down Up syslog
*Feb 20 08:26:32: %LINK-3-UPDOWN: Interface GigabitEthernet 0/1, changed state to down
*Feb 20 08:26:32: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet 0/1, changed state to down
*Feb 20 08:26:25: %LINK-3-UPDOWN: Interface GigabitEthernet 0/1, changed state to up
*Feb 20 08:26:25: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet 0/1, changed state to up
```

```
2.
%AggregatePort 10 has no member port, set duplex failed!
```

-  
-

## 6.7 interface

**interface**

**interface** *interface-type slot-number/interface-number* [*sub-interface-number*]

| <b>interface</b>        |  |
|-------------------------|--|
| <i>interface-type</i>   |  |
| <i>interface-number</i> |  |

-

---

14

1      Aggregateport 1

```
Ruijie(config)# interface Aggregateport 1
```

```
Ruijie(config-if-Aggregateport 1)#
```

2      GigabitEthernet 1/2

```
Ruijie(config)# interface GigabitEthernet 1/2
```

```
Ruijie(config-if-GigabitEthernet 1/2)#
```

3      VLAN 1

```
Ruijie(config)# interface vlan 1
```

```
Ruijie(config-if-VLAN 1)#
```

-

-

-

-

## 6.8 interface range

**interface**

**Interface range** { *port-range* | **macro** *macro\_name* }

---

**define interface-range**

**define interface-range** *macro\_name*



---

**no load-interval**

| <i>seconds</i> | 5 600 |
|----------------|-------|

10

14

1

10

GigabitEthernet 0/1

180

show

interface gigabitEthernet 0/1

3 minutes input rate 15 bits/sec, 0 packets/sec

3 minutes output rate 14 bits/sec, 0 packets/sec 3 minutes input rate 15 bits/sec, 0 packets/sec

3 minutes output rate 14 bits/sec, 0 packets/sec

1

GigabitEthernet 0/1

180

Ruijie(config)# interface gigabitEthernet 0/1

Ruijie(config-if-GigabitEthernet 0/1)# load-interval 180

-

-

-

-

## 6.10 logging

**logging [link-updown | error-frame | link-dither ]**

| <b>link-updown</b> |  |
|--------------------|--|
| <b>error-frame</b> |  |
| <b>link-dither</b> |  |

---

14

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

1

```
Ruijie(config)# logging link-updown
```

```
Ruijie(config)# logging error-frame
```

```
Ruijie(config)# logging link-dither
```

-

-

%LINK-3-UPDOWN: Interface GigabitEthernet 0/0, changed state to up.

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet 0/0, changed state to up.

%PORT-3-ERR\_FRAME: Received error frames on interface GigabitEthernet 0/0. Please check the physical link.

%LINK-4-DITHER: The state of Interface GigabitEthernet 0/1 is astable. Please check the physical link.

%LINK-4-DITHER: The state of interface GigabitEthernet 0/1 is astable and the interface will be shutdown.Please check the physical link

-

-

## 6.11 media-type

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

**no media-type**

---

|                                 |  |
|---------------------------------|--|
|                                 |  |
| <b>auto-select</b>              |  |
| <b>prefer [ fiber   copper]</b> |  |
| <b>fiber</b>                    |  |
| <b>copper</b>                   |  |

14

medium-type auto-select prefer fiber

1      GigabitEthernet 1/1

```
Ruijie(config)# interface GigabitEthernet 1/1
```

```
Ruijie(config-if-GigabitEthernet 1/1)# medium-type copper
```

1      **show interfaces**

---

1500

14

MTU

MTU

1 GigabitEthernet 1/1 MTU 9000

```
Ruijie(config)# interface GigabitEthernet 1/1  
Ruijie(config-if-GigabitEthernet)# mtu 9000
```

1 **show interfaces** MTU

```

GigabitEthernet 0/1 is DOWN , line protocol is DOWN
  Hardware is Broadcom5464 GigabitEthernet, address is 00d0.f865.de9b (bia 00d0.f865.de9b)
  Interface address is: no ip address
  Interface IPv6 address is:
    No IPv6 address
  MTU 1500 bytes, BW1000000 Kbit
  Encapsulation protocol is Ethernet-II, loopback not set
  Keepalive interval is 10 sec , set
  Carrier delay is 2 sec
  Ethernet attributes:
    Last link state change time: 2012-12-22 14:00:48
    Time duration since last link state change: 3 days, 2 hours, 50 minutes, 50 seconds
    Priority is 0
    Medium type is Copper
    Admin duplex mode is AUTO, oper duplex is Unknown
    Admin speed is AUTO, oper speed is Unknown
    Flow receive control admin status is OFF, flow send control admin status is OFF
    Flow receive control oper status is Unknown, flow send control oper status is Unknown
    StormControl: Broadcast is OFF, Multicast is OFF, Unicast is OFF
  Bridge attributes:
    Port-type: trunk
    Native vlan 1
    Allowed vlan lists: 1-4094 //Trunk VLAN
    Active vlan lists: 1, 3-4 // vlan VLAN1 3 4
  Queuing strategy: FIFO
    Output queue 0/0, 0 drops;
    Input queue 0/75, 0 drops
  Rx load is 1/255, Tx load is 1/255
  5 minutes input rate 0 bits/sec, 0 packets/sec
  5 minutes output rate 0 bits/sec, 0 packets/sec
    0 packets input, 0 bytes, 0 no buffer, 0 dropped
    Received 0 broadcasts, 0 runts, 0 giants
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 abort
    0 packets output, 0 bytes, 0 underruns , 0 dropped
    0 output errors, 0 collisions, 0 interface resets

```

#### 4 GigabitEthernet 0/1

```

Ruijie# show interfaces GigabitEthernet 0/1 switchport
Interface          Switchport Mode      Access Native Protected VLAN lists
-----
GigabitEthernet 0/1  enabled  ACCESS   2      1      Disabled ALL

```



---

**show interfaces** [ *interface-type interface-number* ] **status**

| <i>interface-type interface-number</i> |  |
|--|--|
| <b>status</b>                          |  |

14

| GigabitEthernet 0/0 | 1000 Mbit   | 0.002822759%  | 0.001183280%    | 0.004462237% |
|---------------------|-------------|---------------|-----------------|--------------|
| Bandwidth           | Link        | Average Usage | Bandwidth Usage |              |
| Output Usage        | Input Usage |               |                 |              |

-  
-

## 6.17 show vlans

```
show vlans VLAN
show vlans [ VLANID ]
```

| VLANID | VLAN | VLAN | - |
|--------|------|------|---|
|--------|------|------|---|

CLI

14

-

1

```
Ruijie# show vlans
Virtual LAN ID 3 (IEEE 802.1Q Encapsulation)
VLAN Interface FastEthernet 0/0.1
IP address: 1.1.1.1
Received 30 packets,
Transmitted 30 packets
Virtual LAN ID 4 (IEEE 802.1Q Encapsulation)
VLAN Interface FastEthernet 0/0.2
IP address: 1.1.2.1
Received 0 packets,
Transmitted 0 packets
```

```
virtual LAN ID VLAN
vLAN Interface VLAN
Address
Received
Transmitted
```

---

## 6.18 shutdown

**shutdown**

**no shutdown**

|   |   |
|---|---|
| - | - |
|---|---|

UP

14

**show interfaces**  
**no shutdown**

```
1          1
Ruijie(config)# interface Aggregateport 1
Ruijie(config-if-Aggregateport 1)# shut down
```

```
2          1
Ruijie(config)# interface Aggregateport 1
Ruijie(config-if-Aggregateport 1)# no shut down
```

```
1    show interfaces
```

-

-

## 6.19 speed

**speed { 10 | 100 | 1000 | auto }**

**no speed**

| <b>10</b>   | 10M            |
|-------------|----------------|
| <b>100</b>  | 100M           |
| <b>1000</b> | 1000M          |
| <b>auto</b> | 10M 100M 1000M |

14

|        | speed | duplex | 10/100M |
|--------|-------|--------|---------|
| duplex | speed |        |         |
| full   | 10    |        | 10M     |
| Full   | 100   |        | 100M    |
| Half   | 10    |        | 10M     |
| Half   | 100   |        | 100M    |
| Auto   | auto  |        |         |

1 0/0 10/100M

```
Ruijie(config)# interface fast ethernet 0/0
```

```
Ruijie(config-if)#speed 100
```

1 **show interfaces**

1.

```
%AggregatePort 10 has no member port, set duplex failed!
```

---

-

-

## 6.20 xaii-mode

**xaii-mode slot** *slot-num*

4

**no xaii-mode slot** *slot-num*

|                 |       |
|-----------------|-------|
|                 |       |
| <i>slot-num</i> | [2,3] |

14

1 4



## 7 HTTP

|   |       |
|---|-------|
| <a href="#">enable service web-server</a> | HTTP  |
| <a href="#">http check-version</a>        | HTTP  |
| <a href="#">http port</a>                 | HTTP  |
| <a href="#">http secure-port</a>          | HTTPS |
| <a href="#">http update</a>               |       |
| <a href="#">http update mode</a>          | HTTP  |
| <a href="#">http update server</a>        | HTTP  |
| <a href="#">http update set oob</a>       | MGMT  |
| <a href="#">ip http port</a>              | HTTP  |
| <a href="#">ip http secure-port</a>       | HTTPS |
| <a href="#">show web-server</a>           | Web   |
| <a href="#">http update time</a>          | HTTP  |
| <a href="#">upgrade web</a>               | WEB   |
| <a href="#">upgrade web download</a>      | WEB   |
| <a href="#">webmaster level</a>           | Web   |

### 7.1 enable service web-server

HTTP

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

HTTP

**{ no | default } enable service web-server [ http | https | all ]**

|                           |  |             |       |              |       |            |
|---------------------------|--|-------------|-------|--------------|-------|------------|
|                           |  | <b>http</b> | HTTP  | <b>https</b> | HTTPS | <b>all</b> |
| <b>http   https   all</b> |  | HTTP        | HTTPS |              | HTTP  | HTTPS      |

HTTP      HTTPS

14

HTTP                  **all**                  HTTP      HTTPS                  **http**  
    **https**                                  HTTPS

```

no enable service web-server      default enable service web-server      HTTP
no      default                    HTTP      HTTPS

1      HTTP      HTTPS
Ruijie(config)# enable service web-server

1      show service
2      show web-server status      Web

1      HTTP      80
%notice: Failed to open tcp listen, port=[80].

1      Web
-

```

## 7.2 http check-version

```

HTTP
http check-version

```

|   |   |
|---|---|
| - | - |
|---|---|

```

HTTP

```

```

14

```

```

1      HTTP
Ruijie# http check-version
Business modules need to be updated: character-db, route-db
app name: web
  app name      version      filename
-----
character-db    2014.02.09.14.02.09  app_sub_1.exe
character-db    2014.02.09.14.02.09  app_file_list.txt
character-db    2014.02.09.14.02.09  app_sub_3.exe

```

```
character-db 2014 02 09 14 02 09 app_sub_2.exe
route-db     2013 12 01 00      route-choose.db
```

-

1

```
%notice: No business modules registration
```

2

```
%notice: Communicate with the server failed
```

3

```
%warning: Out of memory, application memory failure.
```

4

```
%notice: The server response message format is wrong.
```

5

```
%notice: Suspend, some business modules are upgrading or haven't registered release.
```

6

```
%notice: All business modules are the latest versions.
```

1

DNS

-

### 7.3 http update

```
http update { all | string }
```

|        |  |
|--------|--|
|        |  |
| all    |  |
| string |  |

-

14

1

route-db url-db

```
Ruijie# http update route-db
```

---

```
Downloading updated files, please wait...
Press Ctrl+C to quit
route-db: download and notify successfully.
```

```
1      http check-version          HTTP
```

```
1
%notice: No bussiness modules registration
```

```
2
%notice: The bussiness modules haven't registered
```

```
3
%notice: There are bussiness modules in the upgrading, please wait for a moment.
```

```
4
%notice: Communicate with the server failed
```

```
5
%warning: Out of memory, application memory failure.
```

```
6
%notice: The server response message format is wrong.
```

```
7                                     z
```

14

```

HTTP
HTTP
no HTTP

```

```

1 HTTP
Ruijie(config)# http update mode manual

```

```

-
-
-
-

```

## 7.5 http update server

```

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

```

```

HTTP
no http update server

```

|                                |  |         |    |
|--------------------------------|--|---------|----|
|                                |  |         |    |
| <i>host-name</i>               |  |         |    |
| <i>ip-address</i>              |  |         |    |
| <b>port</b> <i>port-number</i> |  | 1-65535 | 80 |

```

0.0.0.0 80

```

14

```

HTTP
HTTP

```

1

-

-

-

-

## 7.7 http update time

HTTP

**http update time daily *hh:mm***

HTTP

**no http update time**

|              |    |   |
|--------------|----|---|
| <i>hh:mm</i> | 24 | : |
|--------------|----|---|

14

HTTP

Web

(rgos.ruijie.com.cn)

Web

**no**

1 HTTP 23:40

Ruijie(config)# http update time daily 23 40

-

-

-

-

## 7.8 ip http port

HTTP

**ip http port** *port-number*

**no ip http port**

| <i>port-number</i> | HTTP | 80 | 1025-65535 |
|--------------------|------|----|------------|

80

14

HTTP

1 HTTP 8080

Ruijie(config)# ip http port 8080

**show web-service**

Web

-

-

-

## 7.9 ip http secure-port

HTTPS

**ip http secure-port** *port-number*

**no ip http secure-port**

| <i>port-number</i> | HTTPS | 4430 | 1025-65535 |
|--------------------|-------|------|------------|

4430

14

HTTPS

```
1    HTTPS          4443
Ruijie(config)# ip http secure-port 4443
```

```
show web-service      Web
```

```
-
-
-
```

## 7.10 show web-service

Web

```
show web-service
```

|   |   |
|---|---|
| - | - |
|---|---|

14

Web

```
1    Web
Ruijie#show web-service
webservice :
  http      : enable
            : port (9999)
  https     : enable
            : port (4430)
```

| http enable(disable)  | HTTP  |
|-----------------------|-------|
| http port             | HTTP  |
| https enable(disable) | HTTPS |
| https port            | HTTPS |

-

-

## 7.11 webmaster level

Web

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

**no webmaster level** *privilege-level* [ **username** *name* ]

| <i>privilege-level</i>    |                 |
|---------------------------|-----------------|
| <i>name</i>               |                 |
| <i>password</i>           |                 |
| <b>0</b>   <b>7</b>       | 0      7      0 |
| <i>encrypted-password</i> |                 |

hõRPPjÑô ÞÂ à/T.773} el

---

web

level 1

---

Web

0

ruijie

admin

Ruijie(config)# webmaster level 0 username ruijie password admin

-

1

admin guest

%notice: Cannot cancel the default user configure!

2

10

%notice: configure webmaster level %d server reached max 10, add failed

3

32

%notice: Username too long. Please enter less than 32 characters.

-

-

## 8 LICENSING

|                                      |  |
|--------------------------------------|--|
| <a href="#">license copy</a>         |  |
| <a href="#">license grace-period</a> |  |

```
Ruijie#lic copy-all usb0 rg-license-lics/lics.tar
Success to copy all permanent license.
```

**dir**

installed license

**show license all-license**

 installed license

 19881021.lic, 19881023.lic id

1

```
Copy failed, there's no permanent license in the system
```

2

```
Success to copy all permanent license.
```

3

```
Copy failed, there's no such service or license installed in the system
```

4

```
Copy failed, the license is temporary.
```

5

```
Success to copy license vsd lic.
```

1.

2.

-

## 8.2 license grace-period

**license grace-period** *license days*

**no license grace-period** *filename*

**default license grace-period filename**

|                 |  |
|-----------------|--|
| <i>filename</i> |  |
| <i>days</i>     |  |

120

4

SNMP TRAP



-

-

1

Success to set alarm starting point of license LIC VSD

2

There's no license abc in the system

-

### 8.3 license install

**license install**

**flash:**

flash





123.lic

Uninstall failed: there's no license 123.lic of service LIC-WLAN-AP-32 in the system.

3

Uninstall failed: single instance license does not support license based uninstalling

4. VSD

Uninstall LIC-VSD success.

5 LIC-WLAN-AP-32 AP32\_1.lic

Uninstall license AP32\_1.lic of service LIC-WLAN-AP-32 success.

- 1.
- 2.
- 3.

-

## 8.5 license unbind

**license unbind** pak

|     |  |
|-----|--|
|     |  |
| pak |  |

-

4



LIC-FCOE00000012268888



3

Update failed: the newly installed license is older than the system one

4

```
Ruijie#show license all-license
```

```
Searching license in the system..
```

```
1. Service name: LIC-AP-64
```

```
Attribute: Releasable
```

```
[Permanent licenses]      [Licensed serial number]
```

```
19880966 lic              LIC-AP-6400000012264966
```

```
19880988 lic              LIC-AP-6400000012264988
```

```
[Temporary license]      [Licensed serial number]
```

```
19880900 lic              LIC-AP-6400000012264900
```

```
(63 days left)
```

| Service name |  |
|--------------|--|
| Attribute    |  |
| Left days    |  |

o- U P ' îo-

o- u V<sup>a</sup> ço- -

### 8.9 show license usage

ò 0 © ĩ ç ù l Ó ... Õ Ñ ož

|                         |     |   |  |
|-------------------------|-----|---|--|
| o- @ f <sup>a</sup> ço- | @ f | T |  |
| -                       | -   | - |  |

o- x X % "o- Ô Ó % "

o- ð . ' ðo- 2

o- ... 6 -o- 4 x X - } l Ó

o- F â †o- 1 y ò 0 l Ó ' î S

---

-

## 8.10 show license unbind-code

show license unbind-code

| - | - |
|---|---|

2

-

-

-

## 9 PKG\_MGMT

|  |               |               |
|--|---------------|---------------|
|  |               |               |
| <a href="#"><u>patch active</u></a>          |               |               |
| <a href="#"><u>patch deactivate</u></a>      |               |               |
| <a href="#"><u>patch delete</u></a>          |               |               |
| <a href="#"><u>patch running</u></a>         |               |               |
| <a href="#"><u>show component</u></a>        |               |               |
| <a href="#"><u>show patch</u></a>            |               |               |
| <a href="#"><u>show subsystem</u></a>        | kernel rootfs | kernel rootfs |
| <a href="#"><u>show upgrade file</u></a>     |               |               |
| <a href="#"><u>show upgrade history</u></a>  |               |               |
| <a href="#"><u>upgrade</u></a>               |               |               |
| <a href="#"><u>upgrade download tftp</u></a> |               |               |
| <a href="#"><u>upgrade rollback</u></a>      |               |               |

**show patch**

1

Active the patch package success

2

Patch not installed

3

The patch status is already active or running

4

Cannot find the package's scripts file

-

## 9.2 patch deactive

**patch deactive**



**show patch**

1  
clear the patch success

2  
Patch not installed

-

## 9.4 patch running

**patch running**

|   |   |
|---|---|
| - | - |
|---|---|

2

1  
Ruijie#patch running  
\*May 21 17:05:41: %: The patch on the system now is in running status

**show patch**

1  
The patch on the system now is in running status

2  
Patch not installed



Size: 12877    Install time : Wed Mar 5 14:23:12 2012  
 Description: this is a systemmonit package  
 Required packages: None

-----  
 Package: bridge

Version: 2.0.1.37cd5cda    Build time: Wed Dec 7 00:54:56 2011  
 Size: 23245    Install time : Wed Mar 5 14:30:12 2012  
 Description: this is a bridge package  
 Required packages: None

|                   |  |
|-------------------|--|
| Package           |  |
| Version           |  |
| Build time        |  |
| Size              |  |
| Install time      |  |
| Description       |  |
| Required packages |  |

2

Ruijie# show component bridge

package: bridge

Version: 2.3.1.1252ea    Build time: Wed Dec 7 00:54:56 2011  
 Size: 26945    Install time : Wed Mar 19 23:15:2012  
 Description: this is a bridge package  
 Required packages: None

Package files:

- /lib64
- /lib64/libbridge.so
- /sbin
- /sbin/bridge

Package file validate: [OK]

Required relationship verify: [OK]

|  |  |
|--|--|
|  |  |
|--|--|

|                       |               |
|-----------------------|---------------|
| Package file validate | [OK]<br>[ERR] |
| Required package      | [OK]<br>[ERR] |
| Package files         |               |

```

Package : sysnonit
Version: 1.0.1.23cd34aa    Build time: Wed Dec 7 00:58:56 2011
Size: 12877    Install time: Wed Mar 5 14:23:12 2012
Description: this is a systemnonit package
Required packages: None
-----
Package: bridge
Version: 2.0.1.37cd5cda    Build time: Wed Dec 7 00:54:56 2011
Size: 23245    Install time: Wed Mar 5 14:30:12 2012
Description: this is a bridge package
Required packages: None
-----

```

-

## 9.6 show patch

**show patch** [ slot { num | M1 | M2 | all } ] [ patch\_name ]

|                   |  |
|-------------------|--|
|                   |  |
| <i>patch_name</i> |  |

2

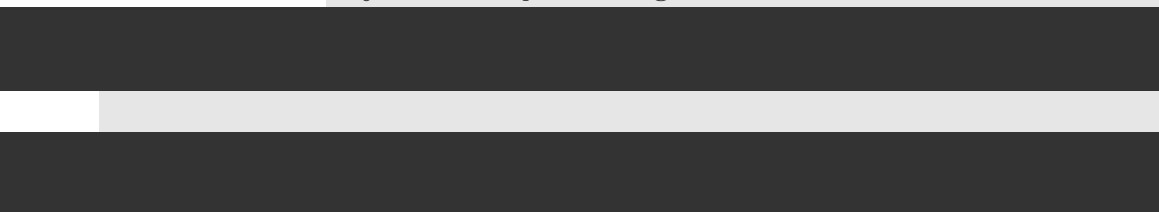
1

```
Ruijie# show patch
patch package patch_install installed in the system version pa1
Package : patch_bridge
status running
Version: pa1      Build time: Mon May 13 09:03:07 2013
      Size: 277    Install time: Tue May 21 03:07:17 2013
      Description: a patch for bridge
      Required packages: None
```

|              |  |
|--------------|--|
| Package      |  |
| status       |  |
| Version      |  |
| Build time   |  |
| Size         |  |
| Install time |  |
| Description  |  |

2

```
Ruijie# show component bridge
```



|                       |               |
|-----------------------|---------------|
| Package file validate | [OK]<br>[ERR] |
| Package files         |               |
|                       |               |

```
Patch package patch_install installed in the system version pal
Package : patch_bridge
Status running
Version pal      Build time: Mon May 13 09:03:07 2013
      Size: 277      Install time: Tue May 21 03:07:17 2013
Description: a patch for bridge
Required packages: None
```

## 9.7 show upgrade file

**show upgrade file *url***

| <i>url</i> | <i>url</i> |
|------------|------------|

2

1

```
Ruijie# show upgrade file flash://bridge_eg1000m2.3.1.1252ea-1.nips.rpm
Name : bridge
Version 1.0.1.23cd34aa
Package type      : common component
Support target    : eg1000m
Size              : 26945
Build time       : Wed Dec  7 00:54:56 2013
```

```

Install date      : (not installed)
Description       : this is a bridge package
Package files :
  Package files:
    /lib64
    /lib64/libbridge.so
    /sbin
    /sbin/bridge
  
```

|                |  |
|----------------|--|
| Name           |  |
| Version        |  |
| Package type   |  |
| Support target |  |
| Size           |  |
| Build time     |  |
| Install date   |  |
| Description    |  |
| Package files  |  |

```

Name : bridge
Version: 1.0.1.23cd34aa
Package type      : common component
Support target    : eg1000m
Size              : 26945
Build time       : Wed Dec  7 00:54:56 2013
Install date     : (not installed)
Description      : this is a bridge package
Package files :
  Package files:
    /lib64
    /lib64/libbridge.so
    /sbin
    /sbin/bridge
  
```

## 9.8 show upgrade history

**show upgrade history**

|  |  |
|--|--|
|  |  |
|  |  |

2

-

-

```
Ruijie#show upgrade history
Last Upgrade Information
  Time:      2014-08-31 12:15:03
  Method:    LOCAL
Package Name: NI8000_RGS11.0(1)BI_CM101200616_install.bin
Package Type: Distribution
```

-

## 9.9 upgrade

**upgrade *url* [ *force* ]**

|              |              |
|--------------|--------------|
|              |              |
| <i>url</i>   | <i>url</i>   |
| <b>force</b> | <b>force</b> |

2

copy

1 main

```
Ruijie#upgrade usb0 /eg1000main_1.0.0of328e91.bin
:*May 20 16:49:57: %7: Upgrade processing is 10%
*May 20 16:49:57: %7: Upgrade processing is 60%
*May 20 16:49:57: %7: Upgrade processing is 90%
*May 20 16:49:57: %7: Upgrade info [OK]
*May 20 16:49:57: %7: Kernel version[2.6.32.91f9d21->2.6.32.9f8b56f]
*May 20 16:49:57: %7: Rootfs version[1.0.02ad02537->1.0.01bcc12e8]
*May 20 16:49:57: %7: Upgrade processing is 100%
*May 20 16:49:57: %7: Restart to take effect !
```

**show version detail**

**show component**

**show patch**

1

Upgrade info [OK]

2

Invalid package file

3

Device don't support

4

The version in device is never or the same

5

U

No enough space for decompress

6

No enough space, rootfs been destroyed. Please upgrade in uboot

7

Already exist patch, please uninstall before upgrade

8

Patch compatibility err

9

some origin content has change

-

## 9.10 upgrade download tftp

tftp

**upgrade download tftp:/path [ force ]****upgrade download oob\_tftp:/path [ force ]**



## 9.11 upgrade rollback

### upgrade rollback

|   |   |
|---|---|
| - | - |
|---|---|

2



1

```
Ruijie#upgrade rollback
05-20 16:49:19 *My 20 16:49:57: %?: kernel rollback version[2.6.32.9f8b56f->2.6.32.91f9d21] [OK]
05-20 16:49:19 *My 20 16:49:57: %?: rootfs rollback version[1.0.0.1bcc12e8->1.0.0.2ad02537] [OK]
05-20 16:49:19 *My 20 16:49:57: %?: Rollback success!
05-20 16:49:19 *My 20 16:49:57: %?: Restart to take effect !
```

### show version detail

1

```
Rollback success!
Restart to take effect !
```

2

```
Not subsys package last upgrade
```

3

```
Last upgrade error skip
```

4

```
Monitor file lost
```

-

## 9.12 clear storage

**clear storage** [ *url* ]

|            |            |
|------------|------------|
|            |            |
| <i>url</i> | <i>url</i> |

2

```
Ruijie#clear storage
Remove the whole storage directory?[y/n]y
Ruijie#clear storage usb0
Remove the file or directory usb0 from the storage?[y/n]y
Ruijie#
```

*url*

-

-

-



**ASME**

---

ASME

1.

---

# 1

|  |      |
|--|------|
| <a href="#">access-share-allowed</a>                 |      |
| <a href="#">access-share-monitor</a>                 |      |
| <a href="#">auto-update</a>                          |      |
| <a href="#">http-warning content</a>                 | HTTP |
| <a href="#">http-warning enable</a>                  | HTTP |
| <a href="#">http-warning interface</a>               | HTTP |
| <a href="#">http-warning title</a>                   | HTTP |
| <a href="#">http-warning expires</a>                 | HTTP |
| <a href="#">ignore net</a>                           | IP   |
| <a href="#">master-terminal</a>                      |      |
| <a href="#">monitor net</a>                          |      |
| <a href="#">notify-delay</a>                         |      |
| <a href="#">router-allowed</a>                       | PC   |
| <a href="#">sensitivity-level</a>                    |      |
| <a href="#">show access-share monitor statistics</a> |      |
| <a href="#">weight threshold</a>                     |      |

## 1.1 access-share-allowed

**access-share-allowed mobile** *<mobile-number>*

0

**no access-share-allowed mobile**

|                      |  |
|----------------------|--|
|                      |  |
| <i>mobile-number</i> |  |

---

```
: 1
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNIL/Z
Ruijie(config)# access-share-monitor
Ruijie(config-access-share)# access-share-allowed mobile 1
Ruijie(config-access-share)#
```

-

-

## 1.2 access-share-monitor

### access-share-monitor



14

```
:
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNIL/Z
Ruijie(config)# access-share-monitor
Ruijie(config-access-share)#
```

-

-

---

## 1.3 auto-update

**auto-update enable**

**no auto-update enable**

|  |  |
|--|--|
|  |  |
|  |  |

14

DNS

ASME

```
:  
Ruijie# configure terminal  
Enter configuration commands, one per line. End with CNIL/Z  
Ruijie(config)# access-share monitor  
Ruijie(config-access-share)# auto-update enable  
Ruijie(config-access-share)#
```

-

-

## 1.4 http-warning content

HTTP

**http-warning content** < *http-warning content string* >

HTTP

**no http-warning content**

---

---

|                                    |
|------------------------------------|
| <i>http-warning content string</i> |
|------------------------------------|

|      |
|------|
| HTTP |
|------|

HTTP

Web

PPPoE

```

:
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNL/Z
Ruijie(config)# access-share monitor
Ruijie(config-access-share)#http-warning enable
Ruijie(config-access-share)#

```

-  
-

### 1.6 http-warning interface

HTTP

**http-warning interface mgmt**

HTTP

**no http-warning interface mgmt**

|  |  |
|--|--|
|  |  |
|  |  |

HTTP

HTTP

HTTP

HTTP

HTTP

ASME

HTTP

**switch**

trunk allow VLAN 4~10 native VLAN 4

```

:
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNIL/Z
Ruijie(config)# access-share monitor
Ruijie(config-access-share)# http warning interface ngnt
Ruijie(config-access-share)#

```

-  
-

## 1.7 http-warning title

HTTP

**http-warning title** < *http-warning title string* >

HTTP

**no http-warning title**

| <i>http-warning title string</i> | HTTP 31 |
|----------------------------------|---------|

HTTP

14

HTTP

HTTP

```

:
Enter configuration commands, one per line. End with CNIL/Z
Ruijie(config)# access-share monitor
Ruijie(config-access-share)# http-w " M [ -

```

-

-

## 1.8 http-warning expires

HTTP

**http-warning expires** <seconds>

HTTP

**no http-warning expires**

|         |      |
|---------|------|
|         |      |
| seconds | HTTP |

14

HTTP

HTTP

HTTP

5

10

*http-warning expires 30*

*HTTP*

*30*

*30*

10

5

```

:
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNIL/Z
Ruijie(config)# access-share monitor
Ruijie(config-access-share)# http-warning expires 30
Ruijie(config-access-share)#

```

-

-

---

## 1.9 ignore net

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

**no ignore net** <network-address> **mask** <mask>

| <i>network-address</i> |  |
|------------------------|--|
| <i>mask</i>            |  |

14



---

**no monitor net** <network-address> **mask** <mask>

|                        |  |
|------------------------|--|
|                        |  |
| <i>network-address</i> |  |
| <i>mask</i>            |  |

14

32

```
:  
Ruijie# configure terminal  
Enter configuration commands, one per line. End with CNIL/Z  
Ruijie(config)# access-share monitor  
Ruijie(config-access-share)# monitor net 100.1.0.0 mask 255.255.0.0  
Ruijie(config-access-share)#
```

1:

```
Ruijie(config-access-share)# monitor net 100.1.0.0 mask 255.255.0.0  
Add ipset succeed
```

2: 32

```
Ruijie(config-access-share)# monitor net 100.1.0.0 mask 255.255.0.0  
Add ipset failed for configure exceed
```

-

## 1.12 notify-delay

---

|                |  |
|----------------|--|
|                |  |
| <i>seconds</i> |  |

30

14

HTTP

---

PC



PC

PC

---

```
:  
Ruijie# configure terminal  
Enter configuration commands, one per line. End with CNL/Z  
Ruijie(config)# access-share monitor  
Ruijie(config-access-share)# no router-allowed  
Ruijie(config-access-share)#
```

-

-

## 1.14 sensitivity-level

**sensitivity-level { low | normal | high }**

**no sensitivity-level**



```

:
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNL/Z
Ruijie(config)# access-share monitor
Ruijie(config-access-share)# sensitivity-level low
Ruijie(config-access-share)#

```

-  
-

## 1.15 show access-share monitor statistics

**show access-share monitor statistics**



14

ASME

```

Ruijie#show access-share monitor statistics
Access-share monitor statistics:
  Monitor time: 0.0.0
  Monitor user capacity :
    available 5000
    license   5000(default 5000 and installed 0)
    max       60000
  Online user : 0 (Max 0)

```



---

```
Ruijie# configure terminal
Enter configuration commands, one per line. End with CNIL/Z
Ruijie(config)# access-share monitor
Ruijie(config-access-share)# weight threshold 50
Ruijie(config-access-share)#
```

-

-



---

1.

---

1

---

**service timestamps**

---

|                             |
|-----------------------------|
| <b>udp-port</b> <i>port</i> |
|-----------------------------|

|     |
|-----|
| 514 |
|-----|

Syslog Server

14

---

4K Bytes  
7

14

**show logging**

**clear logging**

FLASH

Syslog Server

8

| Emergencies   | 0 |  |
|---------------|---|--|
| Alerts        | 1 |  |
| Critical      | 2 |  |
| Errors        | 3 |  |
| Warnings      | 4 |  |
| Notifications | 5 |  |
| Informational | 6 |  |
| Debugging     | 7 |  |

0



---

1 6 6 10000

Ruijie(config)# logging buffered 10000 6

1 **show logging**

-

-

-

---

## 1.4 logging console

**logging console** [ *level* ]

**no logging console**

| <i>level</i> | 0 7 |
|--------------|-----|

7 Debugging )

14

**show logging**

8

| Emergencies   | 0 |  |
|---------------|---|--|
| Alerts        | 1 |  |
| Critical      | 2 |  |
| Errors        | 3 |  |
| Warnings      | 4 |  |
| Notifications | 5 |  |
| Informational | 6 |  |
| Debugging     | 7 |  |

1

6

```
Ruijie(config)# logging console informational
```

1 **show logging**

---

## 1.5 logging count

logging count

no logging count

| - | - |
|---|---|

14

no logging count

1

Ruijie(config)# logging count

1 show logging

-

-

-

## 1.6 logging facility

logging facility *facility-type*

(23)



|             |           |
|-------------|-----------|
| 22 (local6) | Local use |
| 23 (local7) | Local use |

(local7)23

```
1          Syslog      kernel
Ruijie(config)# logging facility kern
```

```
-
-
-
-
```

## 1.7 logging file

FLASH USB

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

FLASH

**no logging file**

|                      |       |          |      |
|----------------------|-------|----------|------|
|                      |       |          |      |
| <b>flash</b>         | FLASH |          |      |
| <b>usb0</b>          | USB0  | 1        | USB  |
|                      | USB   |          |      |
| <b>usb1</b>          | USB1  | 2        | USB  |
|                      | USB   |          |      |
| <i>filename</i>      | txt   |          |      |
| <i>max-file-size</i> | 128K  | 6M bytes | 128K |
| <i>level</i>         | FLASH | 6        |      |

FLASH



---

14

FLASH

FLASH

FLASH



**logging flash flush**

FLASH

1

FLASH

Ruijie(config)# logging flash flush

1

**dir**

FLASH

-

-

-

## 1.9 logging flash interval

FLASH

**logging flash interval** *seconds*

FLASH

**no logging flash interval**

|                                |       |         |
|--------------------------------|-------|---------|
| <b>interval</b> <i>seconds</i> | FLASH | 1~51840 |
|--------------------------------|-------|---------|

FLASH

3600s

1

14

FLASH

no logging

flash interval

FLASH

3600s



FALSH

1 FLASH 5 300s

Ruijie(config)# logging flash interval 300

1 show logging

-

-

-

## 1.10 logging filter direction

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

**no logging filter direction { all | buffer | file | server | terminal }**

|                 |              |            |
|-----------------|--------------|------------|
| <b>all</b>      | Console      | VTY        |
| <b>buffer</b>   | show logging |            |
| <b>file</b>     |              |            |
| <b>server</b>   |              |            |
| <b>terminal</b> | VTY          | Telnet/SSH |

all

14

Console VTY

**terminal**

1.1.1.2

```

1          1.1.1.2 logging filter direction server 1.1.1.2
2          1          logging filter rule single-match level 1
3          logging filter type contains-only
           logging filter direction server

```

```

1          terminal          console   VTY
Ruijie(config)# logging filter direction terminal

```

```

-
-
-
-

```

## 1.11 logging filter type

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

**no logging filter type**

**contains-only**

**filter-only** 20B4C0BB509979602656B06060206BB0B010A8>- Tc 9T0 -1.706.79fly



---

```
1
Ruijie(config)# logging filter type contains-only
```

```
-
-
-
-
```

## 1.12 logging filter rule

**logging filter rule** { **exact-match** **module** *module-name* **mnemonic** *mnemonic-name* **level** *level* | **single-match** [ **level** *level* | **mnemonic** *mnemonic-name* | **module** *module-name* ] }

---

**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* ]

|                                      |  |
|--------------------------------------|--|
| <b>exact-match</b>                   |  |
| <b>single-match</b>                  |  |
| <b>module</b> <i>module-name</i>     |  |
| <b>mnemonic</b> <i>mnemonic-name</i> |  |
| <b>level</b> <i>level</i>            |  |

---

6.

7.



1 LOGIN 5 LOGOUT  
Ruijie(config)# logging filter rule exact-match module LOGIN mnemonic LOGOUT level 5

2 SYS  
Ruijie(config)# logging filter rule single-match module SYS

-  
-  
-  
-

## 1.13 logging life-time

FLASH

**logging life-time level *level* days**

**no logging life-time level *level***

| <i>level</i> |  |
|--------------|--|
| <i>days</i>  |  |

FLASH



FLASH syslog/

1 6 10

Ruijie(config)# logging life-time level 6 10

-  
-  
-  
-

## 1.14 logging monitor

VTY Telnet SSH

**logging monitor** [ *level* ]

VTY

**no logging monitor**

| <i>level</i> |  |
|--------------|--|

VTY 7 Debugging

14

VTY **terminal monitor** VTY  
**logging monitor**

8

| Emergencies | 0 |
|-------------|---|

|               |   |  |
|---------------|---|--|
| Alerts        | 1 |  |
| Critical      | 2 |  |
| Errors        | 3 |  |
| Warnings      | 4 |  |
| Notifications | 5 |  |
| Informational | 6 |  |
| Debugging     | 7 |  |

```
1          VTY          6
```

```
Ruijie(config)# logging monitor informational
```

```
-  
-  
-  
-
```

## 1.15 logging on

**logging on**

**no logging on**

|   |   |
|---|---|
| - | - |
|---|---|

14

```

Syslog Server          Console          VTY          FLASH
1 Log

```

---

```
1
Ruijie(config)# no logging on
```

```
1      show logging
```

```
-
-
-
```

## 1.16 logging rate-limit

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

**no logging rate-limit**

|                 |              |
|-----------------|--------------|
| <i>number</i>   | 1~10000      |
| <b>all</b>      | 0~7          |
| <b>console</b>  |              |
| <b>except</b>   | error(3)     |
| <i>severity</i> | error<br>0~7 |

```
14
```

```
1      debug 10      warning
Ruijie(config)# logging rate-limit all
```

---

## 1.17 logging server

Syslog Server

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

Syslog Server

Syslog Server

**no logging server** [ **oob** ] *ip-address*

---

Syslog Server

514

**no logging server** *ip-address* **udp-prot**

---

|                             |      |
|-----------------------------|------|
| <b>oob</b>                  | MGMT |
| <i>ip-address</i>           | IP   |
| <b>udp-port</b> <i>port</i> | 514  |

Syslog Server

14

---

-

-

## 1.18 logging source interface

**logging source [ interface ]** *interface-type interface-number*

**no logging source [ interface ]**



---

## 1.19 logging source ip

IP  
**logging source ip** *ip-address*

IP  
**no logging source ip**

| <i>ip-address</i> | IPV4 | IPV4 |
|-------------------|------|------|

14

Syslog Server                      IP                      IP  
   IP                      IP  
   IP                      IP                      IP

1                      192.168.1.1    Syslog  
Ruijie(config)# logging source ip 192.168.1.1

-  
-  
-  
-

## 1.20

|   |   |
|---|---|
| - | - |
|---|---|

14

#### UP-DOWN

```
Ruijie# configure terminal
Oct  9 23:40:55 %LINK-5-CHANGED: Interface GigabitEthernet 0/1, changed state to down
Oct  9 23:40:55 %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet 0/1, changed state to DOWN
Ruijie# configure terminal //
```

1

```
Ruijie(config)#line console 0
Ruijie(config-line)#logging synchronous
```

-  
-  
-  
-

## 1.21 logging trap

Syslog Server

**logging trap** [ *level* ]

Syslog Server

**no logging trap**

|              |  |
|--------------|--|
| <i>level</i> |  |
|--------------|--|

---

6 Informational

14

Syslog Server

**logging**

Syslog Server

**logging trap**

**show logging**

8

| Emergencies | 0 |  |
|-------------|---|--|
| Alerts      | 1 |  |

---

|   |   |
|---|---|
| - | - |
|---|---|

/ Log

14

/ Log Log

Mar 22 14:05:45 %LOGIN-5-LOGIN\_SUCCESS: User login from vty0 (192.168.23.68) OK

1 / Log 9 « 90



---

```
Ruijie(config)# service log-format rfc5424
```

```
-  
-  
-  
-
```

## 1.25 service private-syslog

**service private-syslog**

**no service private-syslog**

| - | - |
|---|---|

14

\*timestamp: %facility-severity-mnemonic: description

\* : % - - :

```
*May 31 23 25:21: %SYS-5-CONFIG_I: Configured from console by console
```

timestamp facility-severity-mnemonic: description

- - :

```
May 31 23 31:28 SYS-5-CONFIG_I: Configured from console by console
```

: %

\*

---

1  
Ruijie(config)# service private-syslog

1     **show logging**

-  
-  
-

## 1.26 service sequence-numbers

**service sequence-numbers**

**no service sequence-numbers**

|   |   |
|---|---|
|   |   |
| - | - |

14

1

r

`s`b•iN cñ ^ÁÁ ðÇ- y ...

---

## 1.27 service standard-syslog

RFC3164

**service standard-syslog**

RFC3164

**no service standard-syslog**

|   |   |
|---|---|
|   |   |
| - | - |

14

\*timestamp: %facility-severity-mnemonic: description

\* : % - - :

\*May 31 23 25: 21: %SYS-5-CONFIG-I: Configured from console by console

timestamp %facility-severity-mnemonic: description

% - - :

May 31 23 31: 28 %SYS-5-CONFIG-I: Configured from console by console

\*

:

1

Ruijie(config)# service standard-syslog

1 **show logging**

-

-

-

---

## 1.28 service sysname

**service sysname**

**no service sysname**

| - | - |
|---|---|

14

1

```
Mar 22 15:28:02 %SYS-5-CONFIG: Configured from console by console
Ruijie# config terminal
Enter configuration commands, one per line. End with CNIL/Z
Ruijie(config)# service sysname
Ruijie(config)# end
Mar 22 15:35:57 Ruijie %SYS-5-CONFIG: Configured from console by console
```

1 **show logging**

-

-

-

## 1.29 service timestamps

**service timestamps** [ *message-type* [ **uptime** | **datetime** [ **msec** | **year** ] ] ]

---

**no service timestamps [ message-type ]**

**default service timestamps [ message-type ]**

|                     |               |                 |
|---------------------|---------------|-----------------|
| <i>message-type</i> | log debug log | 0 6             |
|                     | debug         | 7               |
| <b>uptime</b>       | * * * *       | 07:00:10:41     |
| <b>datetime</b>     |               | Jul 27 16:53:07 |
| <b>msec</b>         |               | : : . Jul 27    |
|                     | 16:53:07.299  |                 |
| <b>year</b>         |               | 2007 Jul 27     |
|                     | 16:53:07      |                 |

RTC

14

Uptime

Datetime

1 Log Debug Datetime

```
Ruijie(config)# service timestamps debug datetime msec
Ruijie(config)# service timestamps log datetime msec
Ruijie(config)# end
Oct 8 23:04:58.301 %SYS-5-CONFIG_I: Configured from console by console
```

1 **show logging**

-  
-  
-

---

## 1.30 show logging

show logging

| show logging |   |
|--------------|---|
| -            | - |

1

-

1

RFC5424

show logging

---

| Syslog logging               | enabled, disabled |
|------------------------------|-------------------|
| Console logging              |                   |
| Monitor logging              | VTY               |
| Buffer logging               |                   |
| Standard format              |                   |
| Timestamp debug messages     | Debug             |
| Timestamp log messages       | Log               |
| Sequence-number log messages |                   |
| Sysname log messages         |                   |
| Count log messages           |                   |

Trap logging

---

```
<134>1 2013-07-24T12:29:33.410123Z ruijie SYS 6 SHELL_LOGIN [USER@4881 name="" type=""  
from="console"] user login success.
```

```
<134>1 2013-07-24T12:29:34.343763Z ruijie SYS 6 SHELL_CMD [USER@4881 name=""] [CMD@4881
```

```

Ruijie# show logging config
Syslog logging: enabled
Console logging: level debugging, 15495 messages logged
Monitor logging: level debugging, 0 messages logged
Buffer logging: level debugging, 15496 messages logged
Standard format: false
Timestamp debug messages: datetime
Timestamp log messages: datetime
Sequence-number log messages: enable
Sysname log messages: enable
Count log messages: enable
Trap logging: level informational, 15242 message lines logged, 0 fail
  logging to 202.101.11.22
  logging to 192.168.200.112

```

|                              |                   |
|------------------------------|-------------------|
| Syslog logging               | enabled, disabled |
| Console logging              |                   |
| Monitor logging              | VTY               |
| Buffer logging               |                   |
| Standard format              |                   |
| Timestamp debug messages     | Debug             |
| Timestamp log messages       | Log               |
| Sequence-number log messages |                   |
| Sysname log messages         |                   |
| Count log messages           |                   |
| Trap logging                 | Syslog Server     |

2                      RFC5424                      **show logging config**

```

Ruijie# show logging
Syslog logging: enabled
Console logging: level debugging, 4740 messages logged
Monitor logging: level debugging, 0 messages logged
Buffer logging: level debugging, 4745 messages logged
Statistic log messages: disable
Statistic log messages to terminal: disable
Delay-send file name: syslog_ftp_server, Current write index: 3, Current send index: 3, Cycle: 10 seconds

```

```

Count log messages: enable
Trap logging level informational, 2641 message lines logged, 4155 fail
  logging to 192.168.23.89
  logging to 2000:1
Delay-send logging: 2641 message lines logged
  logging to 192.168.23.89 by tftp

```

|                                    |                   |
|------------------------------------|-------------------|
|                                    |                   |
| Syslog logging                     | enabled, disabled |
| Console logging                    |                   |
| Monitor logging                    | VTY               |
| Buffer logging                     |                   |
| Count log messages                 |                   |
| Statistic log messages             |                   |
| Statistic log messages to terminal |                   |
| Delay-send file name               |                   |
| Trap logging                       | Syslog Server     |
| Delay-send logging                 |                   |

-  
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## 1.32 show logging count

**show logging count**

|   |   |
|---|---|
| - | - |
|---|---|

1

**logging count**  
**show logging count**



