OPCOM3100
DEVICE COMMANDS NOTEBOOK

SOFTWARE VERSION: 2.1.5

Contents

1. Overview

1.1. **Audience**

This note gives a full description of the software command-line and its interface of OPCOM3100 2.0.3, and as a reference for users of OPCOM3100 and the related software.

1.2. **Organization**

There are 9 chapters in this notebook:

Chapter 2: **HOW TO USE COMMAND-LINE**

Describe how to access, control and configure OPCOM3100 device through OPCOM3100 software command-line.

Chapter 3: **SYSTEM MANAGEMENT COMMANDS OF OPCOM3100**

Describe the system management commands supported by the OPCOM3100 software in alphabetical sequence.

Chapter 4 **USER MANAGEMENT COMMANDS OF OPCOM3100**

Describe the user management commands supported by the OPCOM3100 software in alphabetical sequence.

Chapter 5: **LOG COMMANDS OF OPCOM3100**

Describe the log management commands supported by the OPCOM3100 software in alphabetical sequence.

Chapter 6: **NETWORK PROTOCOL CONFIGURATION COMMANDS OF OPCOM3100**

Describe the network protocol configuration commands supported by the OPCOM3100 software in alphabetical sequence.

Chapter 7: **UPGRADE AND CONFIGURATION FILE MANAGEMENT COMMANDS OF OPCOM3100**

Describe the upgrade and configuration file management commands supported by the OPCOM3100 software in alphabetical sequence.

Chapter 8: **ETHERNET INTERFACE MENEGEMENT COMMANDS OF OPCOM3100**

Describe the Ethernet interface management commands supported by the OPCOM3100 software in alphabetical sequence.

Chapter 9: **SDH INTERFACE MANAGEMENT COMMANDS OF OPCOM3100**

Describe the SDH interface management commands supported by the OPCOM3100 software in alphabetical sequence.

Chapter 10: **E1 INTERFACE MANAGEMENT COMMANDS OF OPCOM3100**

Describe the E1 interface management commands supported by the OPCOM3100

software in alphabetical sequence.

Chapter 11: **DCC INTERFACE MANAGEMENT COMMANDS OF OPCOM3100**

Describe the DCC interface management commands supported by the OPCOM3100 software in alphabetical sequence.

1.3. **Reference**

1. *Definition of OPCOM3100 command-line*

2. How to use command-line

2.1. Requirements of software and hardware

Operation environment of hardware: platform of OPCOM3100,
Computer serial interface；
Operation environment of software: WIN98/WIN2000/WINDOWS XP

2.2. Modes of command-line

Mode	Mode description	Access	Prompt
User EXEC	Configuring the basic information and show the parameters and etc.	Login the device and enter the user name and password	OPCOM3100>
Privileged EXEC(enable)	Configuring the basic information such as system time and show the parameters but not the running information of OPCOM3100	Form user EXEC mode, enter **enable** command and password	OPCOM3100#
Global configuration	Configuring all the running parameters of OPCOM3100	From privileged EXEC mode, enter **config** command	OPCOM3100(config)#
Interface configuration	Configuring parameters of Ethernet network management interface, Ethernet service interfaces, E1 interfaces, SDH interfaces and DCC interfaces.	In global configuration mode, enter **interface** command. *[eth/dcc /sdh/e1/snmp]*	OPCOM3100 (config-xxx/n)# *xxx* refers to **eth/dcc/sdh/e1/snmp** *n* refers to **number of the interface**

2.3. **Format explanation of command-line**

1. There are only key words before the first parameter in the command-line.

2. The optional parameter or parameters are in the "[]", and the multi parameters will be separated by "|".

3. If there is the possibility that the required parameters and the command key words are optional, the parameters and the key words are in the "{}", and "|" is used to separate them.

3. System management commands of OPCOM3100

3.1. chinese

【function explanation】
Show the help information in Chinese

chinese
【parameter explanation】
N/A
【default case】
N/A
【command mode】
any mode
【application guide】
N/A
【explanation of command execution echo】
Show the help information in Chinese
【application example】
Show the help information in Chinese
OPCOM3100# **chinese**
Set successfully!
【related command】

Command	Description
english	Show the help information in English

3.2. clear

【function explanation】
Clear the information on the screen

clear

【parameter explanation】
N/A
【default case】
N/A
【command mode】
any mode
【application guide】
N/A

【explanation of command execution echo】
　　N/A

【application example】
- 　　Clear the information on the screen
　　OPCOM3100# **clear**

【related command】
　　N/A

3.3. **config**

【function explanation】
　　Enter global configuration mode

　　config

【parameter explanation】
　　N/A

【default case】
　　N/A

【command mode】
　　Privileged EXEC

【application guide】
　　N/A

【explanation of command execution echo】
- 　　*Configuration mode, one command input per times. End with CTRL-Z.*
　　Information showed when enter global configuration mode

【application example】
- 　　Enter global configuration mode
　　*OPCOM3100# **config***
　　Configuration mode, one command input per times. End with CTRL-Z.
　　OPCOM3100 (config)#

【related command】
　　　N/A

3.4. **disable**

【function explanation】
　Exit from privileged EXEC to User EXEC

　　disable

【parameter explanation】
　　N/A

【default case】
　　N/A

【command mode】
　　Privileged EXEC

【application guide】
　　N/A

【explanation of command execution echo】
    N/A

【application example】
  Exit from privileged EXEC to User EXEC

    OPCOM3100# ***disable***
    OPCOM3100>

【related command】

Command	Description
enable	Enter privileged EXEC

3.5. **enable**

【function explanation】
    Enter privileged EXEC.

    enable

【parameter explanation】
    N/A

【default case】
    N/A

【command mode】
User EXEC

【application guide】
    N/A

【explanation of command execution echo】
    Password:
    Prompt to enter the password which is the same as the login password

【application example】
Enter privileged EXEC
    OPCOM3100> ***enable***
    Password:
    OPCOM3100#

【related command】

Command	Description
disable	Exit from Privileged EXEC.

3.6. **end**

【function explanation】
Exit from present mode to Privileged EXEC.
end
【parameter explanation】

N/A

【default case】

N/A

【command mode】

any mode

【application guide】

Logout when in privileged EXEC and User EXEC, the same function as **CRTL+Z** in this case

【explanation of command execution echo】

N/A

【application example】

- Exit from present mode to Privileged EXEC
  *OPCOM3100 (config)# **end***
  OPCOM3100#

【related command】

Command	Description
CRTL+Z	Exit to Privileged EXEC.

3.7. **english**

【function explanation】

Show help information in English

english

【parameter explanation】

N/A

【default case】

N/A

【command mode】

any mode

【application guide】

N/A

【explanation of command execution echo】

- *set successfully*. !
  Information showed when set the help information in English successfully.

【application example】

- Show help information in English
  *OPCOM3100# **english***
  set successfully.

【related command】

Command	Description
chinese	Show help information in Chinese

3.8. **exit**

【function explanation】
    Exit from present mode to previous mode

    exit
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    any mode
【application guide】
    Logout when in privileged EXEC and User EXEC mode, the same function as **quit** in this case

【explanation of command execution echo】
    N/A
【application example】
•   Exit from present mode to previous mode
    *OPCOM3100 (config)# **exit***
    OPCOM3100#
【related command】

Command	Description
quit	Logout from this login

3.9. **help**

【function explanation】
    Show help information

    help
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    any mode
【application guide】
    N/A
【explanation of command execution echo】
    OPCOM3100 host software provides advanced help feature.   When you need help,
    anytime at the command line please press '?'.

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 me?'.)
Help information when the command executed successfully

【application example】
- show help information
  OPCOM3100# ***help***

【related command】
  N/A

3.10. **history**

【function explanation】
  Show the command list which has been entered during this login

  history

【parameter explanation】
  N/A

【default case】
  N/A

【command mode】
  any mode

【application guide】
  N/A

【explanation of command execution echo】
  N/A

【application example】
- Show the command list which has been entered during this login
  *OPCOM3100#**history***

【related command】

Command	Description
terminal history	Set the number of commands can be kept in memory

3.11. **hostname**

【function explanation】

Change the system name, *no* is by default.

hostname *HOSTNAME*

no hostname

【parameter explanation】
- *HOSTNAME*   system name

【default case】

Default case of this command；
- Default system name is: OPCOM3100;

【command mode】

Privileged EXEC

【application guide】

Use **write** command to save the changed name;

【explanation of command execution echo】
- *set successfully!*
  Information showed when set successfully.
- *Please specify string starting with alphabet*
  information showed when system name does not begin with alphabet.
- *HostName length must less than 16!*
  Information showed when the characters in the system name are more than 16

【application example】
- Change system name
  OPCOM3100# **hostname** *raisecom*
   set successfully!
   raiseccom#
- Restore the default system name
  raiseccom# **no hostname**
  OPCOM3100#

【related command】

N/A

3.12. **interface**

【function explanation】

Enter interface configuration mode

interface [**dcc <1-2>** | **eth <1-8>** | **sdh <1-2>** | **e1 <1-32>** | **snmp**]

【parameter explanation】
- **dcc <1-2>**   serial number of DCC interfaces, two in total.
- **e1 <1-32>**   serial number of E1 interfaces, if the interface sub card is E1 there are 32 E1 interfaces, otherwise the number is 16.
- **sdh <1-2>**   serial number of SDH interfaces, two in total.
- **eth <1-8>**   serial number of Ethernet service interfaces, there are two type according EOS interface sub card: 4 interfaces or 8 interfaces.
- **snmp**   Ethernet network management interface.

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

- enter DCC1 interface configuration mode
  *OPCOM3100(config)#**interface dcc 1***
  OPCOM3100(config-if)#
- enter E1 interface configuration mode
  OPCOM3100(config)#interface eth 1
  OPCOM3100(config-if)#

【related command】

N/A

3.13. **list**

【function explanation】

List all commands in one mode

list

【parameter explanation】

N/A

【default case】

N/A

【command mode】

any mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

- List all commands in privileged EXEC mode
  *OPCOM3100#**list***

【related command】

N/A

3.14. **logout**

【function explanation】

Quit from this login

logout

【parameter explanation】

N/A

【default case】

N/A

【command mode】
　　User EXEC，Privileged EXEC
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】
• 　quit from this login
　　OPCOM3100#logout
　　Login:
【related command】

Command	Description
exit	Exit from present mode to previous mode
quit	Logout from this login

3.15.　**quit**

【function explanation】
　　Quit from this login

　　quit
【parameter explanation】
　　N/A
【default case】
　　N/A
【command mode】
　　any mode
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】
• 　quit from this login in privileged EXEC
　　OPCOM3100#quit
【related command】

Command	Description
exit	Exit from present mode to previous mode
logout	Quit from this login

3.16. **settime**

【function explanation】
Set system time

settime *DATE TIME*

【parameter explanation】
- *DATE*   date to be set and the format is <month/day/year>
- *TIME*   time to be set and the format is <hour:munite:second>

【default case】
N/A

【command mode】
Privileged EXEC

【application guide】
N/A

【explanation of command execution echo】
- System-time changed to xx/xx/xxxx xx:xx:xx !
  I*nformation showed when set the system time successfully*

  The format of time is MM/DD/YYYY HH:MM:SS
      Please try again!
  Information showed when the format of system time is wrong

【application example】
- Set system time as: 11/24/2003 16:41:15
  OPCOM3100# **settime** *11/24/2003 16:41:15*
  【related command】

Command	Description
show clock	Show system date and time

3.17. **show clock**

【function explanation】
Show system date and time

show clock

【parameter explanation】
N/A

【default case】
N/A

【command mode】
Privileged EXEC，User EXEC

【application guide】

N/A

【explanation of command execution echo】

- *Now the time is xx/xx/xxxx xx:xx:xx !*
    Information showed when show present time successfully

【application example】

- Show present date and time
    OPCOM3100# ***show clock***

【related command】

Command	Description
settime	Set system date and time

3.18. **show cpu utilization-ratio**

【function explanation】
    Show utilization-ratio of CPU

    show cpu utilization-ratio

【parameter explanation】
    N/A

【default case】
    N/A

【command mode】
    Privileged EXEC

【application guide】
    N/A

【explanation of command execution echo】
    N/A

【application example】

- Show utilization-ratio of CPU
    OPCOM3100# ***show cpu utilization-ratio***
    cpu utilization-ratio is 79%

【related command】

3.19. **show interface**

【function explanation】
    Show information of interface

    interface {dcc<1-2> | eth<1-8> | sdh<1-2> | e1<1-32> | snmp}

【parameter explanation】

- **dcc <1-2>**   serial number of DCC interfaces, two in total.
- **e1 <1-32>**   serial number of E1 interfaces, if the interface sub card is E1 there are 32 E1 interfaces, otherwise the number is 16.

- **sdh <1-2>**   serial number of SDH interfaces, two in total.
- **eth <1-8>**   serial number of Ethernet service interfaces, there are two type according EOS interface sub card: 4 interfaces or 8 interfaces.
- **snmp**   Ethernet network management interface.

【default case】
    N/A
【command mode】
    Privileged EXEC, User EXEC, Interface configuration mode
【application guide】
    N/A
【explanation of command execution echo】
【application example】
    Show interface information
    OPCOM3100# ***show interface dcc 1***
    dcc1 Internet address: 192.168.4.28
        ppp connect disable
        ppp interval time is 90
        ppp retries times is 3
        ppp work mode is server
        ppp lcp status is illegal
        ppp ipcp status is illegal

        0 octets received
        0 octets sent
        0 packets received
        0 packets sent
        0 unicast packets received
        0 unicast packets sent
        0 non-unicast packets received
        0 non-unicast packets sent
        0 input discards
        0 input unknown protocols
        0 input errors
        0 output errors
【related command】

3.20. **show terminal**

【function explanation】
    Show the information of terminal user

    show terminal

【parameter explanation】
    N/A
【default case】

N/A

【command mode】

　Privileged EXEC

【application guide】

　N/A

【explanation of command execution echo】

　N/A

【application example】

- show the information of present system users.

```
OPCOM3100# show terminal
        terminal        status        timeout           user
        -----------------------------------------------------------
        console         active        600sec             rc
        telnet-1        active        600sec             rc
        telnet-2        inactive      -                  -
        telnet-3        inactive      -                  -
        telnet-4        inactive      -                  -
        telnet-5        inactive      -                  -
```

【related command】

Command	Description
who	Show the user who connects to present system

3.21. **show version**

【function explanation】

　Show information of present software version

　show version

【parameter explanation】

　N/A

【default case】

　N/A

【command mode】

　User EXEC，Privileged EXEC

【application guide】

　N/A

【explanation of command execution echo】

　N/A

【application example】

- Show information of present software version

```
OPCOM3100# show version
        RaiseCom Operating System Software
        Copyright(c) 2001-2003 by Raisecom Science & Technology CO., LTD.
        Product name: OPCOM3100
        RaiseComOS Software Version 1.0.0(Compiled Nov 11 2004 13:37:59)
```

Hardware Version 1.0

FPGA Version 1.2

OPCOM3100 with

16M   bytes DRAM

 4M   bytes Flash Memory

【related command】

Command	Description
show terminal	Show information of terminal users

3.22. **terminal history**

【function explanation】

Set the number of commands that can be kept in memory

terminal history *<1-20>*

【parameter explanation】

• *<1-20>*   number of history commands

【default case】

Default case of this command:

Default number is 20

【command mode】

User EXEC

【application guide】

N/A

【explanation of command execution echo】

• Set successfully!
Information showed when set the number of history command successfully

• 【application example】

• set the number of history command as 10
*OPCOM3100>**terminal history** 10*
Set successfully !
OPCOM3100>

【related command】

Command	Description
history	Show the command list which has been entered during this login
terminal time-out	Set maximum value of terminal time-out
terminal line	Set terminal line parameter

3.23. **terminal line**

【function explanation】

Set the number of rows on terminal, *no* means restoring the default value

terminal line *<5-512>*

no terminal line

【parameter explanation】
<5-512>   range of row number
【default case】
Default case of this command:
Default row number of this command is 24
【command mode】
User EXEC.
【application guide】
N/A

【explanation of command execution echo】
N/A
【application example】
• set the number of rows on terminal as 50
  *OPCOM3100>**terminal line** 50*
【related command】

Command	Description
history	Show the command list which has been entered during this login
terminal time-out	Set maximum value of terminal time-out
terminal history	Set the number of commands that can be kept in memory

3.24. **terminal time-out**

【function explanation】

Set maximum value of terminal time-out

terminal time-out *<0-65535>*

【parameter explanation】

• *<0-65535>*   time-out value, unit is second
【default case】
Default case of this command:
Default value of time-out is 600s.

【command mode】
    User EXEC.
【application guide】
    N/A

【explanation of command execution echo】
• Set successfully!
    information showed when set the value of time-out successfully
【application example】
• Set the value of time-out as 900s.
    OPCOM3100>**terminal time-out** 900
【related command】

Command	Description
history	Show the command list which has been entered during this login
terminal time-out	Set maximum value of terminal time-out
terminal line	Set the number of rows on terminal

3.25. **who**

【function explanation】
    Show the user who connects to present system, * before a user indicates the user who is configuring the device now
        who
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Privileged EXEC
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
• show the user who connects system currently
    OPCOM3100# **who**
【related command】

Command	Description
show terminal	Show information of terminal users

3.26. **sntp broadcast client**

【function explanation】

Configure the *sntp* clients to receive broadcast message

sntp broadcast client

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

- OPCOM3100(config)# sntp broadcast client

【related command】

3.27. **sntp server**

【function explanation】

Configure IP address of sntp server

sntp server A.B.C.D

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

- OPCOM3100(config)# sntp server 192.168.1.111

【related command】

3.28. **show sntp**

【function explanation】

Show sntp configuration information

show sntp

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Privileged EXEC,Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config)# show sntp
SNTP configuration information
No Server address configured
SNTP server   Stratum   Version   Last Receive

【related command】

3.29. **buzzer**

【function explanation】

Enable or disable the buzzer

buzzer (enable|disable)

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

•   OPCOM3100(config)# buzzer enable

【related command】

3.30. **hdlc channel**

【function explanation】

Configure hdlc channels

hdlc channel select (d1d2d3|f2f3k3|f2f3)

【parameter explanation】

N/A
【default case】
　　N/A
【command mode】
　　Global configuration mode
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】
　　OPCOM3100(config)# hdlc channel select d1d2d3
【related command】

3.31. **reboot**

【function explanation】
Reset OPCOM3100.
　　reboot
【parameter explanation】
N/A
【default case】
　　N/A
【command mode】
Privileged EXEC
【application guide】
N/A
【explanation of command execution echo】
N/A
【application example】
　　OPCOM3100# reboot
【related command】

4. User management commands of OPCOM3100

4.1. password

【function explanation】

Change the login password of present user by **password**

password

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Privileged EXEC

【application guide】

The present user's login password can be changed by this command.

【explanation of command execution echo】

set sucessfully!

please execute "write" to save!

information showed when change the present login user's password successfully

- *password not same*!

information showed when change the present login user's password unsuccessfully

【application example】

- Change the login password of present user

OPCOM3100# ***password***

Please input password:

Please input again:

【related command】

Command	Description
user	Add a user and configure the password

4.2. show user

【function explanation】

Show the users' information that has been kept in system

show user

【parameter explanation】

N/A

【command mode】

Privileged EXEC

【application guide】

Use this command to check up how many users can login this system.

【explanation of command execution echo】

N/A

【application example】

- *OPCOM3100#**show user***
    User's name   privilege
    ----
    admin   admin
    aa   admin

【related command】

Command	Description
user	Configure use's information
user privilege	Configure the privilege of special users

4.3. **user**

【function explanation】

Add user and configure password, delete this operation by **no** command

user *USERNAME* **password** { **no-encryption | md5** }   *PASSWORD*

no user *USERNAME*

【parameter explanation】

- *USERNAME*   user name
- **password**   password
- **no-encryption** password is not enciphered
- **md5**   password is enciphered by MD5
- *PASSWORD*   password information

【default case】

Default case of this command;

The default privilege of user set up by this command is ADMINISTRANT, **user privilege** command can be used to revise it

【command mode】

Privileged EXEC

【application guide】

There is at least one user's privilege is ADMINISTRANT in the system database,

Only privileged user whose privilege is ADMINISTRANT is able to use this command.

【explanation of command execution echo】

Set successfully!
Please execute "write" to save!!

Information showed when add user and set the password successfully

【application example】

Add a user named abc, password is 123

OPCOM3100# **user** *abc* **password no-encrypt** *123*

Delete a user named abc

OPCOM3100# **no user** *abc*

【related command】

command	description
hostname	Revise the host name set by special user
user privilege	Revise the privilege of the user
password	Revise the present user's password

4.4. **user privilege**

【function explanation】

Configure the privilege of special users

user *USERNAME* **privilege** [*ADMINISTRANT* | *NORMAL* | *LIMITED*]

【parameter explanation】

- *USERNAME*   user name;
- *ADMINISTRANT*   privilege of manager;
- *NORMAL*   privilege of ordinary user
- *LIMITED*   limit the privilege of user

【default case】

The privilege of user by default is ADMINISTRANT

【command mode】

Privileged EXEC

【application guide】

If some user's privilege need to be limited to forbid him execute some commands, this command can be used, and only manager whose privilege is ADNINISTRNT can use this command.

【explanation of command execution echo】

Set successfully!

Please execute "write" to save!

Information showed when the privilege of special user set successfully

You need higher priority!

The present login user's privilege is not ADMINISTERANT and is not able to revise other users' privilege

【application example】

Set the privilege of user abc as normal

OPCOM3100# **user** *abc* **privilege** *normal*

【related command】

command	description
user	Add user and set the password
show user	Show the information of user

5. Log management commands of OPCOM3100

5.1. log

【function explanation】

Enable or disable log

log   [*enable* | *disable*]

【parameter explanation】
- *enable*   enable the log
- *disable*   disable the log

【default case】

Default case of this command

Default status of this command is ENABLE

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】
- disable the log
  OPCOM3100 (config)# **log** disable

【related command】

Command	Description
log clean	Clear the log
show log	Show the log information

5.2. log clean

【function explanation】

Clear the log

log clean

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】
　　N/A
【application example】
• 　clear the log information
　　*OPCOM3100 (config)# **log clean***
【related command】

Command	Description
log	Enable or disable the log
show log	Show the log information

5.3. **show log**

【function explanation】
　　Show log information
　　show log
【parameter explanation】
　　N/A
【default case】
　　N/A
【command mode】
　　Privileged EXEC
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】
• 　check up present log information
　　*OPCOM3100# **show log***
　　login information of users:
　　DATE　　TIME　USER　MODE　ADDRESS　ACTION　LEVEL
　　Sended trap:
【related command】

Command	Description
log	Enable or disable the log
log clean	Clear present log information

6. Network protocols configuration commands of

OPCOM3100

6.1. arp

【function explanation】

Configure a mapping from an IP address to a physical MAC address, use **no** command to delete a mapping

arp add *A.B.C.D MACADDRESS*

arp delete *A.B.C.D*

【parameter explanation】

A.B.C.D   IP address of the interface

MACADDRESS: <AA.BB.CC.DD.EE.FF>, physical MAC address that the interface has mapped

【default case】

The default ARP table is empty of this command, the address mapping can be gotten through the dynamic ARP protocol.

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

• *Successfully add an entry from ARP table*

Information showed when add a mapping successfully

• *Unsuccessfully add an entry from ARP table*!

Information showed when add a mapping unsuccessfully

【application example】

• Add a mapping

OPCOM3100(config)# ***arp add*** *A.B.C.D MACADDRESS*

【related command】

Command	Description
show arp	Show ARP table

6.2. ip address

【function explanation】

Configure IP address of network manager

ip address *A.B.C.D*﹛*A*.*B.C.D*﹜

【parameter explanation】
- *A.B.C.D*   IP address of network manager in decimal with dot
- {A.*B.C.D*}   subnet mask of network manager's IP address in decimal with dot

【default case】

N/A

【command mode】

SNMP Interface configuration mode

【application guide】

N/A

【explanation of command execution echo】
- *Set successfully!*
  Information showed when configure IP address successfully
- Set unsuccessfully!
  Information showed when configure IP address unsuccessfully

【application example】
- Configure IP address of network manager
  *OPCOM3100(config)# **interface snmp***
  *OPCOM3100(config-snmp)# **ip ddress** 192.168.2.20 255.255.255.0*

【related command】

Command	Description
show interface	Show status information of the interface

6.3. **ip route**

【function explanation】

Add a route. Use **no** command to delete one.

ip route   *A.B.C.D A.B.C.D A.B.C.D*

no ip route *A.B.C.D*

【parameter explanation】
- *A.B.C.D*   the first parameter is the IP address of the destination subnet or host in decimal with dot
- *A.B.C.D*   the second parameter is the IP address subnet mask of the destination subnet or host in decimal with dot
- *A.B.C.D*   the third parameter is the IP address of the gateway

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

The static routing is suitable in the simple network environment where routing protocol is not essential or the routing must be configured by hand. The subnet mask is required to be continuous 1s from the most important bit when it is in dot format such as

255.255.0.0 or 255.255.128.0 but not 255.0.255.0 or 255.1.0.0. If the priority is already configured in the routing, then the static routing will be replaced by the dynamic routing in the case that the routing priority is higher than the default priority of the static routing. The default static routing priority is 1 and is higher than that of any other dynamic routing. The first parameter should be 0.0.0.0 when configure the default routing of the system.

【explanation of command execution echo】
Successfully add a route!
Information showed when adding a route successfully.

Unsuccessfully add a route!
Information showed when adding a route is unsuccessfully.

【application example】
Add a route
OPCOM3100(config)# **ip route** *0.0.0.0 0.0.0.0 192.168.1.1*
Successfully add a route
Delete a route
OPCOM3100(config)# **no ip route** *0.0.0.0 0.0.0.0*
Successfully delete a route
【related command】

Command	Description
show ip route	Show routing information

6.4. **ping**

【function explanation】
Test whether the network is connectable
   ping *A.B.C.D* {**count** *<1-65535>* | **size** *<1-65535>* | **timeout** *<1-255>*}
【parameter explanation 】
- *A.B.C.D*   the IP address of the destination host in decimal with dot;
- **count**   the ping program will exit automatically after having sent certain amount of ICMP echo messages identified by this command
- *<1-65535>*   number of ICMP echo messages will be sent
- **size**   length of additional content of the sending ICMP echo
- *<1-65535>*   appointed length
- **timeout**   the time which the ping program has to wait to decide that the target is not connectable.
- *<1-255>*   the appointed time
【default case】
 Default case of this command
The count is 4, size is 64 and timeout is 3 by default of this command
【command mode】
   Privileged EXEC
【application guide】
   N/A

【explanation of command execution echo】
    N/A
【application example】
Ping the destination host: 192.168.1.119
*OPCOM3100#**ping** 192.168.1.119*
   (Type CTRL+C break)

            PING 192.168.1.119: 56 data bytes

            64 bytes from host (192.168.1.119): icmp_seq=0. time=0. ms

            64 bytes from host (192.168.1.119): icmp_seq=1. time=0. ms

            64 bytes from host (192.168.1.119): icmp_seq=2. time=0. ms

            64 bytes from host (192.168.1.119): icmp_seq=3. time=0. ms

            ----192.168.1.119 PING Statistics----

            4 packets transmitted, 4 packets received, 0% packet loss

            round-trip (ms)   min/avg/max = 0/0/0
【related command】
    N/A

6.5. **show arp**

【function explanation】
    Show present ARP table
    show arp
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    User EXEC，Privileged EXEC
【application guide】
    N/A
【explanation of command execution echo】
You do not have enough privilege to change user information!
    Information showed when a present user whose privilege is not 15 but wants to configure a new user. This command can be used by the user whose privilege is 15.
Set sucessfully!
Information showed when add a new user successfully
Set unsuccessfully!
Information showed when add a new user unsuccessfully
【application example】
Show present ARP table
    OPCOM3100# ***show arp***
    LINK LEVEL ARP TABLE

destination	gateway	flags	Refcnt	Use	Interface
192.168.2.20	00:00:01:02:03:4	405	0	8	lo0
192.168.2.111	00:00:00:20:22:2	c05	0	0	hw0
192.168.2.119	00:50:8d:4a:5d:18	c05	1	298	hw0

【related command】

Command	Description
arp	Add or delete a mapping

6.6. **show ip route**

【function explanation】
    Show route information
    show ip route
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    User EXEC，privilege EXEC
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
- show route information
    *OPCOM3100# **show ip route***
        ROUTE NET TABLE

destination	*gateway*	*flags*	*Refcnt*	*Use*	*Interface*
0.0.0.0	*192.168.1.1*	*3*	*0*	*0*	*motfec0*
192.168.1.0	*192.168.1.145*	*101*	*0*	*0*	*motfec0*

        ROUTE HOST TABLE

destination	*gateway*	*flags*	*Refcnt*	*Use*	*Interface*
127.0.0.1	*127.0.0.1*	*5*	*1*	*0*	*lo0*

【related command】

Command	Description
ip route	Add a routing

6.7. **show rip route**

【function explanation】

Show RIP information

show rip route

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Privileged EXEC

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

- Show RIP information
  OPCOM3100# show rip route
  RIP ROUTER TABLE:

Destination	Gateway	Netmask	Metric	Proto	Timer	Tag
192.168.4.0	192.168.4.28	255.255.255.0	1	8	0	0

  RTS_INTERFACE

【related command】

6.8. **show snmp community**

【function explanation】

show SNMP community name list

show snmp community

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Privileged EXEC, global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

- show SNMP community name list
  OPCOM3100# show snmp community
  ID COMMUNITYNAME   RIGHT

1	public	ro
2	private	rw
3	raisecom	rw

【related command】

Command	Description
snmp community	Set SNMP table and the privilege

6.9. **show snmp-server host**

【function explanation】
Show information of SNMP trap server
show snmp-server host
【parameter explanation】
N/A
【default case】
N/A
【command mode】
User EXEC，Privileged EXEC，global configuration mode
【application guide】
N/A
【explanation of command execution echo】
N/A
【application example】
• Show information of SNMP trap server
*OPCOM3100#**show snmp -server host***
Trap server:
ADDRESS   PORT

192.168.4.250   162
【related command】

Command	Description
snmp-server host	Configure the host of SNMP trap server

6.10. **snmpd**

【function explanation】
Enable SNMP, use **no** command to disable it
[**no**] **snmpd**
【parameter explanation】
N/A
【default case】
N/A
【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

- *Successfully open snmp service*!
  information showed when enable SNMP successfully
- 【application example】
- Enable SNMP
  *OPCOM3100(config)# **snmpd***
  Successfully enable snmp service

【related command】

N/A

6.11. **snmp-server community**

【function explanation】

Configure the COMMUNITY table of SNMP and the privilege (read only or both read and write), use **no** command to delete a COMMUNITY name.

snmp-server community *COMMUNITYNAME* [*RO | RW*]

no snmp-server community *COMMUNITYNAME*

【parameter explanation】

- *COMMUNITYNAME*   name of the COMMUNITY
- *RO*   read only
- *RW*   both read and write
-

【default case】

Default case of this command

The default name of the COMMUNITY of this command is: public, private. The privilege of public is RO and the privilege of private is RW. There are at most 10 COMMUNITY names. 【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

Community name length must less than 25!
Information showed when the characters in the COMMUNITY name is more than 25
Set snmp community name successfully!
Information showed when set SNMP COMMUNITY name successfully
Set snmp community name unsuceessfully!
Information showed when set SNMP COMMUNITY name unsuccessfully

【application example】

Add a COMMUNITY name: RAISECOM, privilege is both read and write
OPCOM3100(config)# snmp-server comm raisecom rw
  Add successfully

【related command】

Command	Description

show snmp community	Show SNMP community name list information

6.12. **snmp-server host**

【function explanation】
Configure a SNMP trap server, use **no** command to delete a trap server, there are at most 8 trap server hosts

snmp-server host *A.B.C.D*〔*<1-65535>*〕

no snmp-server host *A.B.C.D*

【parameter explanation】
- *A.B.C.D*   IP address of trap server host in decimal with dot.
- 〔*<1-65535>*〕   the trap receiving interface of the host

【default case】
Default case of this command
The default port number is 162 of this command

【command mode】
Global configuration mode

【application guide】
N/A

【explanation of command execution echo】
The max number snmp-server host is 8! Set unsuccessfully!
Information showed when a user adds a trap receiving host but there are already 8 hosts in the trap server address pool.
Set trap server successfully!
Information showed when add new host successfully
set failed!
Information showed when add new host unsuccessfully

【application example】
Configure SNMP trap server
OPCOM3100(config)# **snmp-server host** 192.168.1.119
Add successfully

【related command】

command	description
show snmp-server host	Show information of trap server

6.13. **route rip**

【function explanation】
Enable RIP protocol

route rip

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config)# route rip

rip startup is successful

【related command】

no router rip

6.14. **ip rip timer flush**

【function explanation】

Set the RIP flush timer, and use **no** command restore default value

ip rip timer flush <180-500>

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config)# ip rip timer flush 180

Set succcessfully

【related command】

N/A

6.15. **ip rip timer invalid**

【function explanation】

Set RIP invalid timer, use **no** command to recover default value

ip rip timer invalid <120-180>

【parameter explanation】

        N/A
【default case】
        N/A
【command mode】
        Global configuration mode
【application guide】
        N/A
【explanation of command execution echo】
        N/A
【application example】
        OPCOM3100(config)# ip rip timer invalid 120
        Set succcessfully
【related command】
        N/A

6.16. ip rip timer update

【function explanation】
Set RIP update timer, use **no** command to recover default value
        ip rip timer update <30-500>
【parameter explanation】
        N/A
【default case】
        N/A
【command mode】
        Global configuration mode
【application guide】
        N/A
【explanation of command execution echo】
        N/A
【application example】
        OPCOM3100(config)# ip rip timer update 30
        Set succcessfully
【related command】
        N/A

6.17. show rip

【function explanation】
        Show RIP configuration information
        show rip
【parameter explanation】
        N/A

【default case】
　　N/A
【command mode】
　　Privileged EXEC, Global configuration mode
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】
　　OPCOM3100# show rip
　　RIP CONFIG:
　　rip: disable
　　rip receive version: v1v2
　　rip send version: v1v2
　　rip metric: 1
　　rip update time: 30
　　rip invalid time: 180
　　rip flush time: 300
【related command】
　　N/A

7. Upgrade and configuration file management commands of OPCOM3100

7.1. erase startup-config

【function explanation】
    Erase the configuration file: startup-config
    erase startup-config
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Privileged EXEC
【application guide】
    N/A
【explanation of command execution echo】
- Finished erasing!
    information showed when erase the initial configuration file successfully
【application example】
- Erase the configuration file : startup-config
    OPCOM3100# **erase startup-config**
【related command】

Command	Description
show running-config	Show present running configuration

7.2. download

【function explanation】
    Copy file from server
    download {*SYSTEM-BOOT | STARTUP-CONFIG*} {*TFTP | FTP*}
【parameter explanation】
- *SYSTEM-BOOT*   program file to upgrade present system program
    STARTUP-CONFIG   configuration file to cover *startup-config* file
- *TFTP*   download protocol is TFTP;
- *FTP*   download protocol is FTP.
【default case】
    N/A

【command mode】
    Privileged EXEC
【application guide】
    The characters of FTP user name and password are no more than 16 while the file name is no more than 80.
【explanation of command execution echo】
- *User name is empty!*
    Information showed when user name is wrong.；
- *User password is empty!*
    information showed when password is wrong;
- *Invalid input file name!*
    information showed when the download file name is wrong.
- <u>*Copy file succesfully!*</u>
    information showed when download file successfully
- *Copy file unsuceessfully !*
    information showed when download file unsuccessfully
【application example】
- Download OPCOM3100 AGENT from server
    *OPCOM3100 (config)# **download** system-boot ftp*
    Please input server IP Address:192.168.2.119
    Please input FTP User name:wrs
    Please input FTP Password:wrs
    Please input FTP Server File Name: OPCOM3100.Z
    Loading, please wait...file length = 721337
    Please select the disk for saving image
    1. core:
    2. exit
    Please input the number:1
    Writing to flash, please wait....................
    Copy file successfully!
【related command】
    N/A

7.3. **show running-config**

【function explanation】
    Show present running information
    show running-config
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    User EXEC，Privileged EXEC
【application guide】
    N/A

【explanation of command execution echo】
    N/A
【application example】
• Show present running information
    OPCOM3100# **show running-config**
    current running configuration :
    !view
    !
    !enable
    !
    !config
    snmp -server host 192.168.4.250 162
    sdh crossconnect source-port 2 timeslot 3 destination-port 1 timeslot 3
    sdh crossconnect source-port 2 timeslot 6 destination-port 1 timeslot 6
    sdh crossconnect source-port 2 timeslot 9 destination-port 1 timeslot 9
【related command】

Command	Description
erase startup-config	Erase configuration file: startup-config
show startup-config	Show system initial configuration file
Write	Save present configuration to initial file

7.4. **show startup-config**

【function explanation】
Show system initial configuration file
    show startup-config
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Privileged EXEC
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
• Show system initial configuration file
    OPCOM3100# **show startup-config**
    current start up configuration :
    !config

snmp-server host 192.168.4.250 162

sdh crossconnect source-port 2 timeslot 3 destination-port 1 timeslot 3

sdh crossconnect source-port 2 timeslot 6 destination-port 1 timeslot 6

sdh crossconnect source-port 2 timeslot 9 destination-port 1 timeslot 9

【related command】

Command	Description
erase startup-config	Erase configuration file: startup-config
show running-config	Show present running configuration
write	Save present configuration to initial file

7.5. **upload**

【function explanation】

Upload file to server

upload {*SYSTEM-BOOT | STARTUP-CONFIG*} {*TFTP | FTP*}

【parameter explanation】

- *SYSTEM-BOOT*   program file to upgrade present system program
  STARTUP-CONFIG   configuration file to cover *startup-config* file
- *TFTP*   upload protocol is TFTP;
- *FTP*   upload protocol is FTP.
-

【default case】

N/A

【command mode】

Privileged EXEC

【application guide】

N/A

【explanation of command execution echo】

- *Read error!*
  information showed when read data unsuccessfully
- *User name is empty!*
  Information showed when user name is wrong.；
- *User password is empty!*
  information showed when password is wrong;
- Invalid input file name!
  information showed when the upload file name is wrong.
- Copy file successfully !
  information showed when upload file successfully
- *Copy file unsuceessfully!*
  information showed when upload file unsuccessfully

【application example】

- Upload file to server
  *OPCOM3100# **upload** system-boot ftp*
  Please input server IP Address:192.168.4.250

Please input FTP User name:wrs

Please input FTP Password:wrs

Please input FTP Server File Name:aa.z

Please select the file for uploading image

1. core:OPCOM3100.z

2. exit

Please input the number:1

uploading, please wait... finish

Copy file succesfullys !

【related command】

N/A

7.6. **write**

【function explanation】

Save present configuration to initial file

write

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Privileged EXEC

【application guide】

N/A

【explanation of command execution echo】

• Save current configuration successfully!

information showed when save successfully;

【application example】

• Save present configuration to initial file

*OPCOM3100#**write***

Writing running-config to flash, please wait...

Successfully write to flash

【related command】

Command	Description
show snmp-server host	Show information of SNMP trap server

8. Ethernet interfaces management commands of

OPCOM3100

8.1. **autonegotiate**

【function explanation】

Configure the Ethernet interface in AUTONEGOTIATE mode, use **no** command to disable it

[**no**] **autonegotiate**

【parameter explanation】

N/A

【default case】

• default status is: ENABLE

【command mode】

Ethernet interface configuration mode

【application guide】

N/A

【explanation of command execution echo】

• *Set successfully!*

information showed when set the Ethernet interface in AUTONEGOTIATE mode successfully

• *Set unsuceessfully!*

information showed when set the Ethernet interface in AUTONEGOTIATE mode unsuccessfully

【application example】

Set the Ethernet interface in AUTONEGOTIATE mode

OPCOM3100(conifg)# ***interface eth*** *1*

OPCOM3100(conifg-eth/1)# ***autonegotiate***

Set succcessfully

【related command】

N/A

8.2. **description**

【function explanation】

Configure Description of Ethernet interfaces

description *STRING*

【parameter explanation】

• *STRING*   string which characters are no more than 30

【default case】

Default case of this command:

- Default string is: raisecom-bj.

【command mode】

Privileged EXEC

【application guide】

N/A

【explanation of command execution echo】

- Set successfully!
  information showed when configure Description of Ethernet interface successfully

- Set unsuccessfully!
  information showed when configure Description of Ethernet interface unsuccessfully

【application example】

- Set the Description string of the interface as: *raisecom-bj*

  OPCOM3100(conifg)# **interface eth 1**

  OPCOM3100(conifg-eth/1)# **description** *raisecom-bj*

  ethernet interface description set

  OPCOM3100(config-eth/1)# show int eth 1

  Interface:eth1   Description : raisecom-bj

  > *Administration Status   : up   Operation Status   : down*
  > *Ethernet Encapsulation : Gfp   Lcas   :   Enable*
  > *Frame Check Sequence   : Enable*
  > *Autonegotiation   : disable*
  > *Duplex   : half-duplex Speed   : 10baseT*
  > *Auto-Mdix   : enable   Flow-Control   : off*
  > *Max Frame Length   : 1596   Min Frame Length   : 64*
  > *Rx Timeslot num   : 10   Tx Timeslot num   : 10*
  > *RT timeslots: sdhPort-timeslot-timeslotStatus-activeLine*
  > > *sdhPort :<1-2>   timeslotStatus: 1:normal   2:invalid*
  > > *timeslot:<1-63>   activeLine   : 1:workLine 2:protectedLine*

  > *Rx timeslots: 1-01-2-1   1-02-2-1   1-03-2-1   1-04-2-1   1-05-2-1   1-06-2-1*

  1-07-2-1   1-08-2-1   1-09-2-1   1-10-2-1

  > *Tx timeslots: 1-01-2-1   1-02-2-1   1-03-2-1   1-04-2-1   1-05-2-1   1-06-2-1*

  1-07-2-1   1-08-2-1   1-09-2-1   1-10-2-1

【related command】

N/A

8.3. **shutdown**

【function explanation】

Shutdown the interface

shutdown

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Interface configuration mode

【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    N/A
【related command】

8.4. **ethernet encapsulation {gfp|laps}**

【function explanation】
    Configure encapsulation mode of interface
    ethernet   encapsulation
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    OPCOM3100(config)# **ethernet encapsulation laps**
    Set successfully
【related command】
    N/A

8.5. **interface eth**

【function explanation】
    Enter interface configuration mode
    interface eth *<1-8>*
【parameter explanation】
    • *<1-8>*   serial number of interface
【default case】
    N/A
【command mode】
    Privileged EXEC
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

Enter interface configuration mode of interface 1
OPCOM3100>enable
OPCOM3100#config
OPCOM3100(conifg)# **interface eth** *1*
OPCOM3100(conifg-eth/1)#
【related command】
N/A

8.6. **show interface**

【function explanation】
Show specific information of interface
show interface *eth <1-8>*
【parameter explanation】
• eth
• *<1-8>* valid interface is 1 to 8
【default case】
N/A
【command mode】
Privileged EXEC，Interface configuration mode
【application guide】
N/A
【explanation of command execution echo】
N/A
【application example】
Show specific information of interface 1
OPCOM3100(config-eth/1)# show int eth 1
Interface:eth1   Description : raisecom-bj
Administration Status   : up   Operation Status   : down
Ethernet Encapsulation : Gfp   Lcas   :   Enable
Frame Check Sequence   : Enable
Autonegotiation   : disable
Duplex   : half-duplex Speed   : 10baseT
Auto-Mdix   : enable   Flow-Control   : off
Max Frame Length   : 1596   Min Frame Length   : 64
Rx Timeslot num   : 10   Tx Timeslot num   : 10
RT timeslots: sdhPort-timeslot-timeslotStatus-activeLine
sdhPort :<1-2>   timeslotStatus: 1:normal   2:invalid
timeslot:<1-63>   activeLine   : 1:workLine 2:protectedLine
Rx timeslots: 1-01-2-1   1-02-2-1   1-03-2-1   1-04-2-1   1-05-2-1   1-06-2-1
1-07-2-1   1-08-2-1   1-09-2-1   1-10-2-1
Tx timeslots: 1-01-2-1   1-02-2-1   1-03-2-1   1-04-2-1   1-05-2-1   1-06-2-1
1-07-2-1   1-08-2-1   1-09-2-1   1-10-2-1
【related command】
N/A

8.7. **speed**

【function explanation】

Configure the speed and mode of interface

speed {10|100} duplex {full-duplex|half-duplex}

【parameter explanation】

- *10*   rate is 10Mbps
- *100*   rate is 100Mbps
- **duplex**   duplex mode
- **full-duplex**   full-duplex mode
- **half-duplex**   half-duplex mode

【default case】

In default case, rate of interface is autonegotiate;

In default case, mode of interface is autonegotiate;

【command mode】

Interface configuration mode；Privileged EXEC

【application guide】

N/A

【explanation of command execution echo】

set ethernet interface's speed failure.
please disable ethernet interface's autonegotiate at first   !
information showed when configure the rate of interface unsuccessfully

Set successfully!

information showed when configure the rate of interface successfully

【application example】

Configure the rate of interface 0 as 100Mbps

OPCOM3100(conifg)# **interface eth** *1*

OPCOM3100(conifg-eth/1)# **speed** *100*

ethernet interface speed set

【related command】

 N/A

8.8. **auto-mdix**

【function explanation】

Configure MDIX of Ethernet interface, there is **no** command.

[**no**] **auto-mdix**

【parameter explanation】

N/A

【default case】

- Dault status is: ENABLE.

【command mode】

Interface configuration mode.

【application guide】

N/A

【explanation of command execution echo】

- Set successfully!
- Set unsuccessfully!

【application example】

*OPCOM3100(conifg)# **interface eth** 1*

*OPCOM3100(conifg-eth/1)# **auto-mdix***

Set succcessfully

【related command】

N/A

8.9. **flow-control**

【function explanation】

Enable the flow control of Ethernet interface

flow-control (on|off)

【parameter explanation】

N/A

【default case】

- default status of this command is OFF

【command mode】

Interface configuration mode.

【application guide】

N/A

【explanation of command execution echo】

- *Set Successfully!*
- *Set failure!*

【application example】

*OPCOM3100(conifg)# **interface eth** 1*

*OPCOM3100(conifg-eth/1)# **flow-control on***

Set Successfully!

【related command】

N/A

8.10. **timeslot add**

【function explanation】

Configure the mapping between Ethernet interface and sdh-vc12

timeslot add sdh <1-2> **vc12** TSSTRING

【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

*OPCOM3100(conifg-eth/1)# **timeslot add sdh 1 vc12** 1- 2- 3- 4- 5*

ethernet add receive timeslot success.

ethernet add transmit timeslot success.

【related command】
    N/A

8.11. **timeslot delete**

【function explanation】
    Delete the timeslot of Ethernet interface
    timeslot delete sdh *<1-2>* [**vc12** TSSTRING]
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

*OPCOM3100(conifg-eth/1)# **timeslot delete sdh 1 vc12 1-2***

ethernet delete receive timeslot success.

ethernet delete transmit timeslot success.

【related command】
    N/A

8.12. **lcas**

【function explanation】
    Enable LCAS, and there is **no** command

[no] **lcas**

【parameter explanation】

N/A

【default case】

disable

【command mode】

Interface configuration mode.

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config-if)# lcas

Set succcessfully

【related command】

no lcas

9. SDH interface management commands of

OPCOM3100

9.1. description

【function explanation】

　　Set Description string of SDH interface

　　sdh description *string*

【parameter explanation】

　　N/A

【default case】

　　N/A

【command mode】

　　Interface configuration mode.

【application guide】

　　N/A

【explanation of command execution echo】

　　N/A

【application example】

　　OPCOM3100(config)# ***interface sdh** 1*

　　OPCOM3100(config-sdh/1)# ***sdh description raisecom-bj***

　　Set sdh interface descriptin successfully

　　*OPCOM3100#**show interface sdh** 1*

　　interface:sdh1 status :down description: raisecom-bj

　　　　loopback: none

　　　　sdh: stm-1　c2 transmit:0x2

　　　　sdh: stm-1　c2 expected:0x2

　　　　sdh: stm-1　c2 received:0xff

　　　　line exc-threshold: 3　　line sd-threshold: 8

　　　　higher-path exc-threshold: 3　　higher-path sd-threshold: 6

　　　　lower-path exc-threshold: 3　　lower-path sd-threshold: 8

　　　　j0 transmit: Raisecom-Opcom

　　　　j0 expected: Raisecom-Opcom

　　　　j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

　　　　j1 transmit: Raisecom-Opcom

　　　　j1 expected: Raisecom-Opcom

　　　　j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

　　　　vc12 1　j2 transmit: Raisecom-Opcom

vc12 1   j2 expected: Raisecom-Opcom

【related command】
    N/A

9.2. **shutdown**

【function explanation】
    Shutdown interface
    shutdown
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    N/A
【related command】

9.3. **interface sdh**

【function explanation】
    Enter SDH interface configuration mode
    interface sdh *<1-2>*
【parameter explanation】
•   <1-2> serial number of SDH interface
【default case】
    N/A
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

    *OPCOM3100(config)# **interface sdh** 1*

    OPCOM3100(config-sdh/1)#
【related command】
    N/A

9.4. **sdh clksrc**

【function explanation】
    Set clock source of SDH
    sdh clksrc (port1|port2) priority <1-3>
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    OPCOM3100(config)# sdh clksrc port1 priority 1
【related command】

9.5. **sdh clock-mode**

【function explanation】
    Set clock source mode of SDH
    sdh clock-mode (master|slave)
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    OPCOM3100(config)# sdh clock-mode master
【related command】

9.6. **show sdh clock**

【function explanation】
    Show clock information
    s**how sdh clock**

【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
        OPCOM3100(config)# show sdh clock
【related command】

9.7. **loopback**

【function explanation】
    Configure loopback of SDH
    loopback *{local|remote}*
【parameter explanation】
    local   loopback locally
    remote   loopback remotely
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

    *OPCOM3100(config-sdh/1)# **loopback** remote*

    Set successfully
    *OPCOM3100#**show interface sdh** 1*
    interface:sdh1 status :down description: raisecom-bj
        loopback: remote
        sdh: stm-1   c2 transmit:0x2
        sdh: stm-1   c2 expected:0x2
        sdh: stm-1   c2 received:0xff
        line exc-threshold: 3   line sd-threshold: 8
        higher-path exc-threshold: 3   higher-path sd-threshold: 6
        lower-path exc-threshold: 3   lower-path sd-threshold: 8
        j0 transmit: Raisecom-Opcom

j0 expected: Raisecom-Opcom

j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

j1 transmit: Raisecom-Opcom

j1 expected: Raisecom-Opcom

j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

vc12 1   j2 transmit: Raisecom-Opcom

vc12 1   j2 expected: Raisecom-Opcom

【related command】

N/A

9.8. **sdh aps-restore-waittime**

【function explanation】

Set aps restore wait time

sdh aps-restore-waittime   <1-12>

【parameter explanation】

Unit is minute

【default case】

5

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config)# ***sdh aps-restore-waittime 3***

Set successfully

【related command】

N/A

9.9. **sdh aupje-threshold**

【function explanation】

Configure the threshold of AU adjust pointer

sdh aupje-threshold {positive|negative} <1-65535>

【parameter explanation】

{ positive|negative }：select positive AU adjust pointer or negative AU adjust
pointer

positive：positive pointer

negative：negative pointer

<1-65535>：threshold value

【default case】

　　900

【command mode】

　　SDH interface configuration mode

【application guide】

【explanation of command execution echo】

【application example】

　　OPCOM3100# **config**

　　OPCOM3100(config)# **interface sdh 2**

　　OPCOM3100(config-sdh/2)# **sdh aupje-threshold positive 300**

　　Set successfully

【related command】

N/A

9.10.　**show sdh aps**

【function explanation】

　　Show configuration information of aps

　　sdh sdh aps

【parameter explanation】

　　N/A

【default case】

　　N/A

【command mode】

　　Global configuration mode

【application guide】

　　N/A

【explanation of command execution echo】

　　N/A

【application example】

　 *OPCOM3100(config)# **show sdh aps***

　　sdh protect switch is disable.

　　sdh aps restore waittime is 10 minutes

　　sdh timeslot is unlocked.

【related command】

　　N/A

9.11.　**sdh crossconnect**

【function explanation】

　　Configure the crossconnect of the device

　　sdh crossconnect source-port <1-2> timeslot　 *<1-63>* **destination-port**

<1-2> **timeslot** *<1-63>*

　　【parameter explanation】

　　　　N/A

　　【default case】

　　　　N/A

　　【command mode】

　　　　Global configuration mode

　　【application guide】

　　　　N/A

　　【explanation of command execution echo】

　　　　N/A

　　【application example】

　　　　N/A

　　【related command】

　　　　N/A

9.12. **show sdh crossconnect**

　　【function explanation】

　　　　Show SDH crossconnect information

　　　　Show **sdh crossconnect**

　　【parameter explanation】

　　　　N/A

　　【default case】

　　　　N/A

　　【command mode】

　　　　Privileged EXEC

　　【application guide】

　　　　N/A

　　【explanation of command execution echo】

　　　　N/A

　　【application example】

　　　　N/A

　　【related command】

　　　　N/A

　OPCOM3100# show sdh crossconnect

　Index source-port　source-timeslot　destination-port destination-timeslot

　--

Index	source-port	source-timeslot	destination-port	destination-timeslot
1	1	1	0	1
2	1	2	0	2
3	1	4	0	4
4	1	5	0	5
5	1	7	0	7
6	1	8	0	8
7	1	10	0	10

| 8 | 1 | 11 | 0 | 11 |
| 9 | 1 | 13 | 0 | 13 |

---more---   ('q','Q' to quit; 'ENTER' to next line; other key to   continue)

9.13. **sdh device-type**

【function explanation】
    Set device type of SDH
    sdh device-type *{tm|adm}*
【parameter explanation】
    N/A
【default case】
    adm
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    N/A
【related command】
    N/A

9.14. **show sdh device-type**

【function explanation】
    Show SDH device type

    show sdh device-type

【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Privileged EXEC
【application guide】
    N/A

【explanation of command execution echo】
    N/A
【application example】
    Show device type of SDH
        OPCOM3100# show sdh device-type
        device type is adm

【related command】

9.15. **sdh es-threshold**

【function explanation】
Set threshold value of SDH bit error second
sdh es-threshold {section|line|high-path|low-path} *<1-900>*
【parameter explanation】
{section|line|high-path|low-path}：select the segment
section：regeneration segment
line：multiplex segment
high-path：high order path
low-path：low order path
<1-900>：threshold value of bit error second
【default case】
900
【command mode】
Interface configuration mode
【application guide】
【explanation of command execution echo】
【application example】
OPCOM3100# **config**
OPCOM3100(config)# **interface sdh 2**
OPCOM3100(config-sdh/2)# **sdh es-threshold line 300**
Set successfully
【related command】

9.16. **sdh exc-threshold**

【function explanation】
Set SDH excessive threshold
sdh exc-threshold {line|higher-path|lower-path}   <3-5>
【parameter explanation】
line   Set excessive threshold of SDH line
higher-path   Set excessive threshold of SDH higher order path
lower-path   Set excessive threshold of SDH lower order path
<3-5>   value of excessive threshold
【default case】
3
【command mode】
Interface configuration mode.
【application guide】

N/A
【explanation of command execution echo】
    N/A
【application example】
    N/A
【related command】
    N/A

9.17. **sdh force-switch**

【function explanation】
    Force protection switch
    sdh force-switch *{work-line|protection-line|clear} {timeslot TSSTRING|e1*
<1-32>|eth <1-8> }
【parameter explanation】
    work-line   switch to work-line
    protection-line   switch to protection-line
【default case】
    N/A
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
OPCOM3100# show int e1 1

Interface:e1-1   Administration Status :up   Operation Status :down

Description: slot0 e1-1   send code: NRZ

e1 Loopback: none

RT timeslots: sdhPort-timeslot-activeLine

sdhPort : <1-2>   timeslot: <1-63>

activeLine : 1:workLine 2:protectedLine

recv-timeslot: 1-41-1   trans-timeslot: 1-41-1

*OPCOM3100(config)# **sdh force-switch protection-line e1 1***

Set successfully
OPCOM3100# show int e1 1
Interface:e1-1   Administration Status :up   Operation Status :down
Description: slot0 e1-1   send code: NRZ
e1 Loopback: none

RT timeslots: sdhPort-timeslot-activeLine

sdhPort : <1-2>   timeslot: <1-63>

activeLine : 1:workLine 2:protectedLine

recv-timeslot: 1-41-2   trans-timeslot: 1-41-1

【related command】

N/A

9.18. **sdh net-type**

【function explanation】

Configure SDH net type

sdh net-type *{line|loop}*

【parameter explanation】

line   configure SDH net as line structure

loop   configure SDH net as loop structure

【default case】

line

【command mode】

Global configuration mode

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config)# **sdh net-type** *loop*

Set successfully

OPCOM3100# **show sdh net-type**

net type is loop

【related command】

N/A

9.19. **show sdh net-type**

【function explanation】

Show SDH net type

show sdh net-type

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Privileged EXEC

【application guide】

N/A

【explanation of command execution echo】
　　N/A
【application example】
　　Show SDH net type
　　OPCCOM3100# show sdh net-type
　　　net type is loop
【related command】

9.20.　**sdh overhead c2**

【function explanation】
Configure HP path label
　　sdh overhead c2 expected BYTE transmit BYTE
【parameter explanation】
　　byte content of byte c2, in hexadecimal.
【default case】
　　0x2
【command mode】
　　Interface configuration mode.
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】

　　OPCOM3100(config)# **interface sdh** *1*

　　OPCOM3100(config-sdh/1)# **sdh overhead c2** *0x2*

　　sdh overhead set.

　　*OPCOM3100#***show interface sdh** *1*
　　interface:sdh1 status :down description: raisecom-bj
　　　loopback: none
　　　sdh: stm-1　c2 transmit:0x2
　　　sdh: stm-1　c2 expected:0x2
　　　sdh: stm-1　c2 received:0xff
　　　line exc-threshold: 3　　　line sd-threshold: 8
　　　higher-path exc-threshold: 3　　higher-path sd-threshold: 6
　　　lower-path exc-threshold: 3　　lower-path sd-threshold: 8
　　　j0 transmit: Raisecom-Opcom
　　　j0 expected: Raisecom-Opcom
　　　j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x0
　　　j1 transmit: Raisecom-Opcom
　　　j1 expected: Raisecom-Opcom

j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

vc12 1   j2 transmit: Raisecom-Opcom

vc12 1   j2 expected: Raisecom-Opcom

【related command】

N/A

9.21. **sdh overhead j0**

【function explanation】

Set regenerator section trace J0, use **no** command to disable J0.

sdh overhead j0 expected *exp-msg* **transmit** *msg*

【parameter explanation】

exp-msg required message; *msg* transmitting message

【default case】

N/A

【command mode】

Interface configuration mode.

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config)# ***interface sdh*** *1*

OPCOM3100(config-sdh/1)# ***sdh overhead j0 expected*** *raisecom* ***transmit***

raisecom

sdh overhead expect j0 set success

sdh overhead transmit j0 set successfully

OPCOM3100# ***show interface sdh*** *1*

interface:sdh1 status :down description: raisecom-bj

loopback: none

sdh: stm-1   c2 transmit:0x2

sdh: stm-1   c2 expected:0x2

sdh: stm-1   c2 received:0xff

line exc-threshold: 3   line sd-threshold: 8

higher-path exc-threshold: 3   higher-path sd-threshold: 6

lower-path exc-threshold: 3   lower-path sd-threshold: 8

j0 transmit: raisecom

j0 expected: raisecom

j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

j1 transmit: Raisecom-Opcom

j1 expected: Raisecom-Opcom

j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

vc12 1   j2 transmit: Raisecom-Opcom

vc12 1   j2 expected: Raisecom-Opcom

【related command】
N/A

9.22. **sdh overhead j1**

【function explanation】
Set higher order trail trace J1, use **no** command to disable J1
sdh overhead j1 expected *exp-msg* **trasnsmit** *msg*
【parameter explanation】
exp-msg required message; *msg* transmitting message
【default case】
N/A
【command mode】
Interface configuration mode.
【application guide】
N/A
【explanation of command execution echo】
N/A
【application example】

OPCOM3100(config)# ***interface sdh 1***

OPCOM3100(config-sdh/1)# ***sdh overhead j1 expected*** *raisecom* ***trasnsmit***

raisecom

sdh overhead expect j1 set success

sdh overhead transmit j1 set successfully

*OPCOM3100#**show interface sdh** 1*
interface:sdh1 status :down description: raisecom-bj
  loopback: none
  sdh: stm-1   c2 transmit:0x2
  sdh: stm-1   c2 expected:0x2
  sdh: stm-1   c2 received:0xff
  line exc-threshold: 3   line sd-threshold: 8
  higher-path exc-threshold: 3   higher-path sd-threshold: 6
  lower-path exc-threshold: 3   lower-path sd-threshold: 8
  j0 transmit: raisecom
  j0 expected: raisecom
  j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0
  j1 transmit: raisecom
  j1 expected: raisecom
  j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

vc12 1   j2 transmit: Raisecom-Opcom

vc12 1   j2 expected: Raisecom-Opcom

【related command】

N/A

9.23. **sdh overhead j2**

【function explanation】

Configure the length of J2, expected message and transmitting message

sdh overhead j2 [vc12 <1-63>]   expected *exp-msg* **trasnsmit** *msg*

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Interface configuration mode.

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100(config-sdh/1)# **sdh overhead j2 vc12 1 expected** *raisecom*

trasnsmit *raisecom*

sdh overhead expect j2 set success

sdh overhead transmit j2 set successfully

OPCOM3100# **show interface sdh** *1*

interface:sdh1 status :down description: raisecom-bj

loopback: none

sdh: stm-1   c2 transmit:0x2

sdh: stm-1   c2 expected:0x2

sdh: stm-1   c2 received:0xff

line exc-threshold: 3   line sd-threshold: 8

higher-path exc-threshold: 3   higher-path sd-threshold: 6

lower-path exc-threshold: 3   lower-path sd-threshold: 8

j0 transmit: raisecom

j0 expected: raisecom

j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

j1 transmit: raisecom

j1 expected: raisecom

j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0

vc12 1   j2 transmit: raisecom

vc12 1   j2 expected: raisecom

【related command】
    N/A

9.24. **sdh protect-switch**

【function explanation】
    Enable or disable SDH protect-switch
    sdh protect-switch *{enable|disable}*
【parameter explanation】
    enable   enable protect-switch
    disable   disable protect-switch
【default case】
    N/A
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    *OPCOM3100(config)# **sdh protect-switch disable***
    Change protect-switch you will lost all timeslot configuration[Y/N]:y
    Set Successfully
    please execute "write" to save!
    Please reboot opcom3100!
    *OPCOM3100# **show sdh aps***
      sdh protect switch is disable.
      sdh aps restore waittime is 3 minutes
      sdh timeslot is unlocked.
【related command】
    N/A

9.25. **sdh sd-threshold**

【function explanation】
    Set SDH signal degrate threshold
    sdh sd-threshold { line|higher-path|lower-path }   <6-8>
【parameter explanation】
    line   Set signal degrate threshold of SDH line
    higher-path   Set signal degrate threshold of SDH higher order path
    lower-path   Set signal degrate threshold of SDH lower order path
    <6-8>   value of degrate threshold
【default case】
    8

【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

    OPCOM3100(config-sdh/1)# **sdh sd-threshold** *line 8*

    Set successfully
    OPCOM3100#show interface sdh 1
    interface:sdh1 status :down description: raisecom-bj
        loopback: none
        sdh: stm-1   c2 transmit:0x2
        sdh: stm-1   c2 expected:0x2
        sdh: stm-1   c2 received:0xff
        line exc-threshold: 3   line sd-threshold: 8
        higher-path exc-threshold: 3   higher-path sd-threshold: 6
        lower-path exc-threshold: 3   lower-path sd-threshold: 8
        j0 transmit: raisecom
        j0 expected: raisecom
        j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0
        j1 transmit: raisecom
        j1 expected: raisecom
        j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0
        vc12 1   j2 transmit: raisecom
        vc12 1   j2 expected: raisecom
【related command】
    N/A

9.26. **sdh ses-threshold**

【function explanation】
    Set the SDH threshold value of serious bit error second
    sdh ses-threshold {section|line|high-path|low-path} *<1-900>*
【parameter explanation】
    {section|line|high-path|low-path}：select the segment
                    section：regeneration segment
                    line：multiplex segment
                    high-path：high order path
                    low-path：low order path
            <1-900>：threshold value of serious bit error second
【default case】
    900

【command mode】
    Interface configuration mode
【application example】

    OPCOM3100# **config**
    OPCOM3100(config)# **interface sdh 2**
    OPCOM3100(config-sdh/2)# **sdh ses-threshold line 300**
【explanation of command execution echo】
    Set successfully
【related command】

9.27. **sdh timeslot**

【function explanation】
    Configure SDH timeslot lock
    sdh timeslot {locked|unlocked}
【parameter explanation】
    locked   Lock timeslot and protect switch
    unlocked   Unlock timeslot and protect switch
【default case】
    unlocked
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    *OPCOM3100(config)# **sdh timeslot unlocked***
     Set Successfully
    OPCOM3100# show sdh aps
       sdh protect switch is enable.
       sdh aps restore waittime is 10 minutes
       sdh timeslot is unlocked.
【related command】
    N/A

9.28. **show interface sdh**

【function explanation】
    Show information of SDH interface

show interface sdh *<1-2>*

【parameter explanation】
 N/A
【default case】
 N/A
【command mode】
 User EXEC, Privileged EXEC
【application guide】
 N/A
【explanation of command execution echo】
 N/A
【application example】
 *OPCOM3100#**show interface sdh** 1*
 interface:sdh1 status :down description: raisecom-bj
  loopback: none
  sdh: stm-1 c2 transmit:0x2
  sdh: stm-1 c2 expected:0x2
  sdh: stm-1 c2 received:0xff
  line exc-threshold: 3 line sd-threshold: 8
  higher-path exc-threshold: 3 higher-path sd-threshold: 6
  lower-path exc-threshold: 3 lower-path sd-threshold: 8
  j0 transmit: raisecom
  j0 expected: raisecom
  j0 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0
  j1 transmit: raisecom
  j1 expected: raisecom
  j1 received: 0x00x00x00x00x00x00x00x00x00x00x00x00x00x00x00x0
  vc12 1 j2 transmit: raisecom
  vc12 1 j2 expected: raisecom
【related command】
 N/A

9.29. **show interface sdh timeslot**

【function explanation】
 Check up SDH timeslot
 show interface sdh *<1-2>* **timeslot** *[<1-63>]*
【parameter explanation】
 N/A
【default case】
 N/A
【command mode】
 Privileged EXEC
【application guide】
 N/A

【explanation of command execution echo】
　　N/A
【application example】
　　OPCOM3100# **show interface sdh 1 timeslot**
　　sdh-port timeslot port
　　--
　　1　　　　1　　　　e1-1
　　1　　　　2　　　　e1-22
　　1　　　　3　　　　crossconnect-1
　　1　　　　4　　　　e1-4
　　1　　　　5　　　　e1-25
　　1　　　　6　　　　crossconnect-2
【related command】
　　N/A

10.   E1 interface management commands of

OPCOM3100

10.1. description

【function explanation】
    Set Description of E1 interface
    description *string*
【parameter explanation】
    Characters of parameter *string* are no more than 30
【default case】
    raisecom-bj
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    N/A
【related command】
    N/A

10.2. shutdown

【function explanation】
    Shutdown interface
    shutdown
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    N/A

【related command】

10.3. **timeslot add**

【function explanation】

Add a mapping from E1 interface to SDH timeslot

timeslot add sdh <1-2> **vc12** <1-63>

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Interface configuration mode.

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100 (config-e1/1)# ***timeslot add sdh 1 vc12 1***

e1 add receive timeslot success

e1 add transmit timeslot success

【related command】

N/A

10.4. **timeslot delete**

【function explanation】

Delete a mapping from E1 interface to SDH timeslot

timeslot delete

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Interface configuration mode.

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100 (config-if)# ***timeslot delete***

e1 delete receive timeslot success

e1 delete transmit timeslot   success

【related command】
    N/A

10.5. **loopback**

【function explanation】
    Configure E1 loopback
    loopback {local|remote}
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

    OPCOM3100(cofig-if)# ***loopback*** *local*

    Set Successfully
【related command】
    N/A

10.6. **interface e1**

【function explanation】
    Enter E1 interface configuration mode
    interface e1 *<1-32>*
【parameter explanation】
•   <1-32> serial number of E1 interface
【default case】
    N/A
【command mode】
    Global configuration mode
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】

    OPCOM3100(config)# ***interface e1*** *1*

    OPCOM3100(config-e1/1)#
【related command】

N/A

10.7. **show interface e1**

【function explanation】

Check up configuration information of E1, including timeslot configuration information.

show interface e1 <1-32>

【parameter explanation】

N/A

【default case】

N/A

【command mode】

Privileged EXEC

【application guide】

N/A

【explanation of command execution echo】

N/A

【application example】

OPCOM3100# show interface e1 1

Interface:e1-1   Administration Status :up   Operation Status :up
*   Description: slot0 e1-1   send code: NRZ*
*   e1 Loopback: none*
*   recv-timeslot :0-0-1   trans-timeslot:0-0*

【related command】

N/A

11.   DCC interface management commands of

OPCOM3100

11.1. interface dcc

【function explanation】
Enter DCC interface configuration mode
interface dcc <1-2>
【parameter explanation】
<1-2>:channel number of DCC
【default case】
N/A
【command mode】
Global configuration mode
【application guide】
N/A
【explanation of command execution echo】
N/A
【application example】
N/A
【related command】
N/A

11.2. shutdown

【function explanation】
Shutdown DCC interface
shutdown
【parameter explanation】
N/A
【default case】
N/A
【command mode】
Interface configuration mode.
【application guide】
N/A
【explanation of command execution echo】
N/A
【application example】
N/A

【related command】

Command	Description
no shutdown	Enable DCC interface

11.3. **ip unnumbered**

【function explanation】
　　Set ip unnumbered of the DCC port
　　ip unnumbered
【parameter explanation】
　　N/A
【default case】
　　N/A
【command mode】
　　Interface configuration mode.
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】
　　OPCOM3100(config-if)# ip unnumbered
　　Set successfully
【related command】
　　N/A

11.4. **ip address**

【function explanation】
　　Configure IP address of DCC interface
　　ip address A.B.C.D [A.B.C.D]
【parameter explanation】
　　A.B.C.D　IP address
　　[A.B.C.D]　Mask address
【default case】
　　N/A
【command mode】
　　Interface configuration mode.
【application guide】
　　N/A
【explanation of command execution echo】
　　N/A
【application example】
　　*OPCOM3100(config-dcc/1)# **ip address 192.168.4.28***

Set succccessfully
【related command】
    N/A

11.5. **echo-time**

【function explanation】
    Set PPP echo interval time
    echo interval time <1-300>
【parameter explanation】
    Unit is second
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    OPCOM3100(config-if)# ***echo-time 1***
    Set succccessfully
【related command】
    N/A

11.6. **echo retry times**

【function explanation】
    Set PPP retries times
    echo retry times <1-5>
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    OPCOM3100(config-if)# echo retry times 2
    Set succccessfully

【related command】
    N/A

11.7. **auto-connect**

【function explanation】
    Enable PPP auto-connect
    auto-connect
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    OPCOM3100(config-dcc/1)#auto-connect
【related command】
    N/A

11.8. **show interface dcc**

【function explanation】
    Check up configuration information of DCC interface
    show interface dcc <1-2>
【parameter explanation】
    N/A
【default case】
    N/A
【command mode】
    Privileged EXEC,Interface configuration mode.
【application guide】
    N/A
【explanation of command execution echo】
    N/A
【application example】
    OPCOM3100# show interface dcc 1
    dcc1 Internet address: 192.168.4.28
        connect disable
        interval time is 90
        retries times is 3

work mode is server
ppp lcp status is illegal
ppp ipcp status is illegal

0 octets received
0 octets sent
0 packets received
0 packets sent
0 unicast packets received
0 unicast packets sent
0 non-unicast packets received
0 non-unicast packets sent
0 input discards
0 input unknown protocols
0 input errors
0 output errors

【related command】
　　N/A

BROADBAND
to RAISECOM