RAISECOM

RC953-8FE16E1
Configuration Guide

Software version: RC953-8FE16E1_V1.0.20060626

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Contents

1.   Overview

RC953-8FE16E1 configuration guide is for the network manager responsible for configuring RC953-8FE16E1. This guide provides information about configuring and troubleshooting the device. It includes descriptions of the management interface options and the features supported by the device.

1.1. Organization

There are 16 chapters in this guide:

Chapter 1: overview

Chapter 2: how to use command-line

Introduce how to use the command-line of RC953-8FE16E1;

Chapter 3: system command configuration

Introduce the system use the system commands of RC953-8FE16E1;

Chapter 4: RC953-8FE16E1 basic configuration

Introduce how to configure RC953-8FE16E1

Chapter 5: Configuring the remote RC952-FEE1

Introduce how to configure remote RC952-FEE1 on local RC953-8FE16E1

Chapter 6: Configuring the remote RC952-FXE1

Introduce how to configure remote RC952-FXE1 on local RC953-8FE16E1

Chapter 7: Configuring the remote RC953-FE8E1

Introduce how to configure remote RC953-FE8E1 on local RC953-8FE16E1

Chapter 8: Configuring the remote RC953-FX8E1

Introduce how to configure remote RC953-FX8E1 on local RC953-8FE16E1

Chapter 9: Configuring the remote RC953-FE4E1

Introduce how to configure remote RC953-FE4E1 on local RC953-8FE16E1

Chapter 10: Configuring the remote RC953-FX4E1

Introduce how to configure remote RC953-FX4E1 on local RC953-8FE16E1

Chapter 11: Configuring the map of RC953-8FE16E1

Introduce how to configure the map of RC953-8FE16E1

Chapter 12: Configuring the loop back detedtion

Introduce how to configure the loop back detedtion of RC953-8FE16E1

Chapter 13: Configuring the network management interface of RC953-8FE16E1

Introduce how to configure the network management interface of

RC953-8FE16E1

Chapter 14: Configuring the SNMP of RC953-8FE16E1

   Introduce how to configure the SNMP of RC953-8FE16E1

Chapter 15: Hub-and-spoke application of RC953-8FE16E1 and RC952-FEE1

Chapter 16: Hub-and-spoke application of RC953-8FE16E1 and RC953-FE8E1

1.2. Abbreviation

FE: Fast Ethernet

GE: Gigabit Ethernet

1.3. Reference

RC953-8FE16E1 Command Reference

2. How to use the command-line

2.1. Software and hardware

Hardware: RC953-8FE16E1
    Computer serial interface;

Software: WIN98/WIN2000
            /WINDOWS XP

2.2. Command-line mode

User EXEC mode	To connect the remote device, change terminal settings on a temporary basis, perform basic tests, and display system information.
Privileged EXEC mode	From User EXEC mode, enter **enable** and password to login. In this mode, user can configure the basic information of the device.
Global configuration mode	From Privileged EXEC mode enter **config** to enter Use this command to configure parameters that apply to the whole device.
SNMP configuration mode	In global configuration mode, enter **snmp** command to enter SNMP configuration mode, enter **exit** to quit.
Interface E1 mode	In globle configuration mode, enter **interface e1** command to enter interface e1 mode; enter **exit** to quit.
Interface Ethernet mode	In globle configuration mode, enter **interface eth** command to enter interface Ethernet mode, enter **exit** to quit.
Interfaceconvert mode	In globle configuration, enter **remote interfaceconvert** command to configure the remote interface converter (remote RC952FEE1 or RC952FXE1), enter **exit** to quit.

Remote RC952FEE1 mode	In configuration mode, enter **remote rc952fee1** to configure remote RC952FEE1, enter **exit** to quit.
interface Ethernet mode of RC952FEE1	In RC952FEE1 mode, use **interface eth** command to enter interface Ethernet mode of RC952FEE1
interface e1 mode of RC952FEE1	In RC952FEE1 mode, use **interface e1** command to enter interface e1 mode of RC952FEE1
Remote RC952FXE1 mode	In global configuration mode, use **remote rc952fxe1** command to enter RC952FXE1 mode, use **exit** command to quit.
interface e1 mode of RC952FXE1	In RC952FXE1 mode, use **interface e1** command to enter interface e1 mode RC952FXE1; use **exit** command to quit.
interface fx-ethernet mode of RC952FXE1	In RC952FXE1 mode, use **interface fx-ethernet** command to enter interface fx-ethernet mode of RC952FXE1; use **exit** command to quit.
Remote RC953FE8E1 user mode	In global configuration mode, use **remote rc953fe8e1** command to enter RC953FE8E1 user mode; use **exit** to quit.
interface Ethernet mode of RC953FE8E1	In RC953FE8E1 user mode, use **interface eth** command to enter interface Ethernet mode of RC953FE8E1.
interface e1 mode of RC953FE8E1	In RC953FE8E1 user mode, use **interface e1** command to enterface interface e1 mode of RCFE8E1; use **exit** command to quit.
Remote RC953FX8E1 user mode	In global configuration mode, use **remote rc953fx8e1** command to enter RC953FX8E1 use mode; use **exit** command to quit.
interface e1 mode of RC953FX8E1	In RC953FX8E1 user mode, use **interface e1** command to enter interface e1 mode of RC953FX8E1; use **exit** command to quit.
interface fx-ethernet mode of RC953FX8E1	In RC953FX8E1 user mode, use **interface fx-ethernet** command to enter interface fx-ethernet mode of RC953FX8E1; use **exit** command to quit.

2.3. Get help

Command	Description
help	Get a short system help
*abbreviated-command-entry***?**	Get a list for all the available commands that match a particular string prefix (*abbreviated-command-entry*). For example: Raisecom> **en?** **english enable**
abbreviated-command-entry<**Tab** >	Makeup a incompleted command. For example. Raisecom#**show ser**<Tab> Raisecom#**show service**
?	List all the commands under this mode. For example Raisecom#**?**
command **?**	List all the key words and options for particular command with a short help information for it. Raisecom#**show ?**

2.4. Use history commands

Switch will record 20 history commands by default. User can use

Raisecom>**terminal history** *<0-20>* command to comfigure the recorded historical command count.

Use command **history** to show history command.

2.5. Editing properties

up arrow:	last entered command
down arrow:	next entered command
left arrow:	move a character left
right arrow:	move a character right
backspace:	delete a character in front of the cursor
Ctrl+d:	delete a character at the cursor
Ctrl+a:	move the cursor to the beginning of the command line
Ctrl+e:	move the cursor to the end of the command line
Ctrl+k:	delete all the characters on the right side the cursor
Ctrl+w:	delete all the characters on the left side of the cursor

Ctrl+u: delete the row all

Ctrl+z: exit from other modes to privileged mode

3. System command configuration

This chapter introduces the basic system configuration and user management.

3.1. Basic system command and the configration

clear   clear the information on the screen
list   Use this command to show all commands under one mode

3.2. Configuration files and startup files management

1. Configuration files

➢   The present system configuration file is: startup_config.conf;
➢   Use **write** command to save configuration information to the flash file systems, when the system is restarted, the configuration information will be reloaded automatically;
➢   Use **erase** command to delete files.

2. Startup files

➢   That is program file, the program file name for current system is RC953.z;
➢   User can use TFTP protocol or FTP protocol to upload files to the server or download program files from the server.
➢   User **dir** command to check flash system files.
➢   Use **show version** command to check software version information.

User management
The system has a default username **raisecom** and the password **raisecom;**
Add a new user, the steps are as follows:

Step	Command	Description
1	**user** *USERNAME* **password** { **no-encryption** | **md5** } *PASSWORD*	·*USERNAME* Username; ·**Password** password key word; ·{ **no-encryption | md5} use no-encryptionor md5 encryption password.** ·*PASSWORD* password information;
2	**user** *USERNAME* **privilege**	·*USERNAME* username;

	<1-15>	**·Privilege** privilege key word; ·*<1-15>*　user privilege.
3	**Write**	Save configuration information
4	**show user**	Show user information.

4. Configuring RC953-8FE16E1

4.1 E1 interface configuration of RC953-8FE161E1

This chapter includes the following parts:
- RC953-8FE16E1 configuration list of E1 interface
- Step by step introduction of the configuration list
- Monitoring and maintenance

4.1.1. RC953-8FE16E1 configuration list of E1 interface

- E1 interface description (description STRING)
- Clock mode (clock-mode(master|slave))
- Frame E1 mode configuration of E1 interface (frame)
- Unframed E1 mode configuration of E1 interface (unframed)
- Time slot allocation (timeslot {1-31})
- CRC enable and disable (crc-auto (enable|disable))
- Remote E1 interface loop back ([no] remote-e1-loopback)
- E1 Loop back ([no] loopback)
- Enable or disable inner BERT (Bit Error Rate Test) (bert (enable|disable))

4.1.2. Step by step introduction of the configuration list

4.1.2.1. E1 interface description

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	description STRING	Configuration the description of the E1 interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# description raisecom
raisecom(config-E1/1)#show interface

4.1.2.2. Clock mode (clock-mode (master|slave))

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	clock-mode(master|slave)	Configure the clock mode, master clock mode or slave clock mode
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# clock-mode master
raisecom(config-E1/1)#show interface

4.1.2.3. Frame E1 mode configuration of E1 interface

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	frame	Configure the E1 mode as frame E1 mode
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# frame
raisecom(config-E1/1)#show interface

4.1.2.4. Unframe E1 mode configuration of E1 interface

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	unframe	Configure the E1 mode as unframed E1 mode
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# unframe
raisecom(config-E1/1)#show interface

4.1.2.5. Time slot allocation

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	timeslot {1-31}	Configure the time slot of E1 interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# timeslot 1-5
raisecom(config-E1/1)#show interface

4.1.2.6. Enable or disable the CRC function of E1 interface

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	crc-auto (enable|disable)	Enable or disable the CRC function of E1 interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# crc enable
raisecom(config-E1/1)#show interface

4.1.2.7. Remote E1 interface loop back configuration

Step	Command	Description

1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	[no] remote-e1-loopback	Start the loop back function on remote E1 interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# remote-e1-loopback
raisecom(config-E1/1)#show interface

4.1.2.8. Local E1 loop back configuration

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	[no] loopback	Start the loop back function o
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# loopback
raisecom(config-E1/1)#show interface

4.1.2.9. Enable or disable the inner Bit Error Rate Test function

Step	Command	Description
1	config	Enter global configuration mode
2	Interface e1 <1-16>	Enter the interface e1 mode
3	bert (enable|disable)	Enable or disable the inner Bit Error Rate Test function of a particulart E1 interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface e1 1
raisecom(config-E1/1)# bert enable
raisecom(config-E1/1)#show interface

4.1.3. Monitoring and maintenance

In interface e1 mode use show interface command to check the current E1 status and configuration information

```
raisecom(config-E1/1)#show interface
E1:1
    Basic Info:
        Description:unknown
        Clock Mode:master
        Frame Mode:framed
        Frame timeslot:0-31
        Frame CRC State:disable
        Frame CRC Autonegotiation:disable
        Flow control:OFF
    remote deviceID:1    remote E1ID:1

    Maintenance:
        Loopback(config):disable
        remote-e1-loopback(config):disable
        Bert:disable

    Packet Statistics:
        TX Packet Number:50
        RX Packet Number:0
        RX Error Packet Number:211

    Performance Statistics:
        Error Second:0
        Serious Error Second:0
        Bit Error Rate: Zero

    Fault State:
        LOS:Normal
        AIS:Normal
        LOF:Normal
        CRC:Normal
        GIDERR:Normal
raisecom(config-E1/1)#
```

4.2. Ethernet interface configuration of RC953-8FE16E1

This chapter includes the following parts:
- RC953-8FE16E1 configuration list of Ethernet interface
- Step by step introduction of the configuration list
- Monitoring and maintenance

4.2.1. Monitoring and maintenance

4.2.2. RC953-8FE16E1 configuration list of Ethernet interface

- Enable Ethernet interface (no shutdown))
- Shut Ethernet interface (shutdown)
- Configure the auto negotiation (speed (auto))
- Configure the speed and duplex mode of the Ethernet interface (speed (10|100) duplex (full|half))
- Flow control configuration (flow-control (on|off))
- Reset the counter (reset-statistics)

4.2.3. Step by step introduction of the configuration list

4.2.3.1. Enable Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Interface ethernet <1-8>	Enter interface Ethernet mode
3	no shutdown	Enable Ethernet interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface eth 1
raisecom(config-ethernet/1)# no shutdown
raisecom(config- eth-1)#show interface

4.2.3.2. Shutdown Ethernet interface

Step	Command	Description

1	config	Enter global configuration mode
2	Interface ethernet <1-8>	Enter interface Ethernet mode
3	shutdown	Shutdown Ethernet interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface ethernet 1
raisecom(config-ethernet/1)# shutdown
raisecom(config-ethernet/1)#show interface

4.2.3.3. Auto negotiation configuration

Step	Command	Description
1	config	Enter global configuration mode
2	Interface ethernet <1-8>	Enter the interface Ethernet mode
3	speed auto	Enable the auto negotiation
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface eth 1
raisecom(config-ethernet/1)# speed auto
raisecom(config-ethernet/1)#show interface

4.2.3.4. Configure the speed and duplex of Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Interface ethernet <1-8>	Enter the interface Ethernet mode of RC953-8FE16E1
3	Speed (100|10) duplex (full|half)	Configure the speed and duplex of the particular Ethernet interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface eth 1
raisecom(config-ethernet/1)# speed 100 duplex half
raisecom(config-ethernet/1)#show interface

4.2.3.5. Flow control

Step	Command	Description
1	config	Enter global configuration mode
2	Interface ethernet <1-8>	Enter the interface Ethernet mode of RC953-8FE16E1
3	flow-control (on|off)	Enable or disable the flow control of the Ethernet interface
4	show interface	Show configuration information

raisecom#config

raisecom(config)# interface eth 1

raisecom(config-ethernet/1)# flow-control on

raisecom(config-ethernet/1)#show interface

4.2.3.6. Reset the counter

Step	Command	Description
1	config	Enter global configuration mode
2	Interface ethernet <1-8>	Enter the interface Ethernet mode of RC953-8FE16E1
3	reset-statistics	Reset the counter
4	show interface	Show configuration information

raisecom#config

raisecom(config)# interface eth 1

raisecom(config-ethernet/1)# reset-statistics

raisecom(config-ethernet/1)#show interface

4.2.4. Monitoring and maintenance

In interface Ethernet mode use **show interface** command to check all the Ethernet interface configurations.

raisecom(config-ethernet/1)#show interface

Port 1:

Basic Info:

Linkstatus:down

speed-duplex: 10M-half

Manage port:On
Config Info:
Port Switch:On
Auto negotiate:enable
auto-MDIX:enable
flowcontrol:ON

Performance Statistics:
TX Packet Number:0
TX Bytes Number:0
RX Packet Number:0
RX Bytes Number:0
RX Lost Packet Number:0
Collision Number:0

4.3. Trunk interface configuration of RC953-8FE16E1

This chapter introduces how to configure trunk on RC953-8FE16E1 and includes the following parts:

- Introduction of trunk interface
- Trunk interface configuration list of RC953-8FE16E1
- Step by step introduction of trunk interface congiuration list
- Monitoring and maintenance

4.3.1. Introduction of trunk interface

Trunk interface (Link Aggregation) of Ethernet port enables a redundant Ethernet access for the most uptime of Ethernet services.

Please refer to chapter 11 for the configuration of trunk.

4.3.2. Trunk configuration list of RC953-8FE16E1

- Enable the trunk interface (no shutdown))
- Shutdwon the trunk interface (shutdown)
- Configure the auto negotiation of trunk interface (speed auto)
- Speed and duplex configurartion of trunk interface (speed (10|100) duplex (full|half))
- Flow control configuration (flow-control (on|off))
- Reset the counter (reset-statistics)

4.3.3. Step by step introduction of trunk interface configuration list

4.1.1.1   Enable the trunk interface

Step	Command	Description
1	config	Enter global configuration mode
2	interface trunk	Enter the interface trunk mode of RC953-8FE16E1
3	no shutdown	Enable the trunk interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface trunk
raisecom(config-trunk)# no shutdown
raisecom(config-trunk)#show interface

4.1.1.2 Shutdown trunk interface

Step	Command	Description
1	config	Enter global configuration mode
2	interface trunk	Enter the interface trunk mode of RC953-8FE16E1
3	shutdown	Shutdown trunk interface
4	show interface	Show configuration information

raisecom#config
raisecom(config)# interface trunk
raisecom(config-trunk)# shutdown
raisecom(config-trunk)#show interface

4.1.1.3   Configure the auto negotiation of trunk interface

Step	Command	Description
1	config	Enter global configuration mode
2	interface trunk	Enter the interface trunk mode of RC953-8FE16E1
3	speed auto	Configure the auto negotiation of trunk interface
4	show interface	Show configuration information

raisecom#config

raisecom(config)# interface trunk

raisecom(config-trunk)# speed auto

raisecom(config-trunk)#show interface

4.1.1.4   Speed and duplex configuration of trunk interface

Step	Command	Description
1	config	Enter global configuration mode
2	interface trunk	Enter the interface trunk mode of RC953-8FE16E1
3	speed (100|10) duplex (full|half)	Configure the speed and duplex mode of trunk interface
4	show interface	Show configuration information

raisecom#config

raisecom(config)# interface trunk

raisecom(config-trunk)# speed 100 duplex half

raisecom(config-trunk)#show interface

4.1.1.5 Flow control configuration

Step	Command	Description
1	config	Enter global configuration mode
2	interface trunk	Enter the interface trunk mode of RC953-8FE16E1
3	flow-control (on|off)	Enable or disable the flow control function
4	show interface	Show configuration information

raisecom#config

raisecom(config)# interface trunk

raisecom(config-trunk)# flow-control on

raisecom(config-trunk)#show interface

4.1.1.6   Reset the counter

Step	Command	Description
1	config	Enter global configuration mode
2	interface trunk	Enter the interface trunk mode of RC953-8FE16E1
3	reset-statistics	Reset the counter
4	show interface	Show configuration information

raisecom#config

raisecom(config)# interface trunk

raisecom(config-trunk)# reset-statistics

raisecom(config-trunk)#show interface

4.1.2 Monitoring and maintenance

In interface trunk mode use **show interface** command to check the configuration information of trunk interface.

raisecom(config-trunk)#show interface

Trunk Port:

Basic Info:

Linkstatus:down

speed-duplex: 10M-half

Manage port:On

Config Info:

Port Switch:On

Auto negotiate:enable

auto-MDIX:enable

flowcontrol:ON

Performance Statistics:

TX Packet Number:0

TX Bytes Number:0

RX Packet Number:0

RX Bytes Number:0

RX Lost Packet Number:0

Collision Number:0

5. Configuring remote RC952-FEE1

5.1. Basic configuration of remote RC952-FEE1

This chapter how to configure remote RC952-FEE1 on RC953-8FE16E1 and includes the following parts:

- Remote RC952-FEE1 configuraiton list
- Step by step introduction of remote RC952-FEE1 configuration list
- Monitoring and maintenance

5.1.1. Remote RC952-FEE1 configuration lise

- Fault-pass-through (fault-pass (enable|disable))
- Reset remote RC952-FEE1(reset)

5.1.2. Step by step introduction of remote RC952-FEE1 configuration list

5.1.2.1. Enable or disable fault pass through

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter RC952-FEE1 configuration mode
3	fault-pass (enable|disable)	Enable or disable fault-pass-through function
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc952fee1 1
raisecom(config-RC952FEE1/1)# fault-pass enable
raisecom(config-RC952FEE1/1)#show interface

5.1.2.2. Reset the remote RC952-FEE1

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter RC952-FEE1 configuration mode
3	reset	Reset remote RC952-FEE1
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc952fee1 1
raisecom(config-RC952FEE1/1)# reset
raisecom(config-RC952FEE1/1)#show interface

5.1.3. Monitoring and maintenance

In Remote RC952-FEE1 configuration mode use **show device** command to check the
configuration information of RC952-FEE1

raisecom(config-RC952FEE1/1)#show device
Device 1:RC952FEE1
Basic Running Info:
Management Operation Status:Slave
version:A.0-0.0-E0
Optical Module Type:noexist
Fault-pass:disable
Basic Config Info:
Fault-pass:disable

5.2. E1 interface configuration of remoter RC952-FEE1

This chapter introdues the configuration of remote RC952-FEE1's E1 interface,
including the following parts:
- Remote RC952-FEE1 E1 interface configuration list
- Step by step introduction of remote RC952-FEE1 E1 interface configuration list
- Monitoring and maintenance

5.2.1. Remote RC952-FEE1 E1 interface configuration list

- Clock mode configuration (clock-mode(master|slave))
- Enable or disable CRC function (crc-auto (enable|disable))

5.2.2. Step by step introduction of remote RC952-FEE1 E1 interface configuration list

5.2.2.1. Clock mode configuration

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter remote RC952FEE1 configuration mode
3	Interface e1	Enter the E1 configuration mode of remoter RC952FEE1
4	clock-mode(master|slave)	Configure the clock: master clock or slave clock
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fee1 1
raisecom(config-RC952FEE1/1)# clock-mode master
raisecom(config- RC952FEE1/1-E1)#show interface

5.2.2.2. Enabel or disable the CRC function

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter remote RC952FEE1 configuration mode
3	Interface e1	Enter the E1 configuration mode of remote RC952FEE1
4	Crc-auto (enable|disable)	Enabel or disable the CRC function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fee1 1

raisecom(config-RC952FEE1/1)#crc enable

raisecom(config- RC952FEE1/1-E1)#show interface

5.2.3. Monitoring and maintenance

In the E1 configuration mode of remote RC952FEE1 use **show interface** command to check RC952-FEE1 E1 interface configuration

Raisecom(config-RC952FEE1/1-E1)# show interface

Port 1:RC952FEE1

Basic Running Info:

Clock Mode:slave

Frame Mode:framed

Frame timeslot:0

Frame CRC autonegotiation:disable

Frame CRC Check:disable

Basic Config Info:

Clock Mode:slave

Frame Mode:unframed

Frame timeslot:N/A

Frame CRC autonegotiation:disable

Packet Statistics:

TX Packet Number:0

RX Packet Number:0

RX Error Packet Number:0

Fault State:

LOS:Normal

AIS:Normal

LOF:Normal

CRC:Normal

5.3. Ethernet interface configuration of remote RC952-FEE1

This chapter introduces how to configure the Ethernet interface of remote RC952-FEE1 and includes the following parts:

- Remote RC952-FEE1 Ethernet interface configuration list
- Step by step introduction of remote RC952-FEE1 Ethernet interface configraion list

• Monitoring and maintenance

5.3.1. Remote RC952-FEE1 Ethernet interface configuration list

- Enable the Ethernet interface of remote RC952-FEE1 (no shutdown))
- Shutdown the Ethernet interface of remote RC952-FEE1 (shutdown)
- Auto negotiation configuration of remote RC952-FEE1 Etherent interface (speed auto)
- Speed and duplex configuration of remote RC952-FEE1 Etherent interface (speed (10|100) duplex (full|half))
- Flow control configuration of remote RC952-FEE1 Etherent interface (flow-control (on|off))

5.3.2. Step by step introduction of remote RC952-FEE1 Ethernet interface configuration list

5.3.2.1. Enable the Etherent interface of remote RC952-FEE1

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter remote RC952-FEE1 configuration mode
3	Interface eth	Enter the Ethernet interface configuration mode of remote RC952FEE1
4	no shutdown	Enable the Ethernet interface
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fee1
raisecom(config-RC952FEE1/1)# interface eth 1
raisecom(config-RC952FEE1/1-eth)# no shutdown
raisecom(config-RC952FEE1/1-eth)#show interface

5.3.2.2. Shutdown the Etherent interface of remote RC952-FEE1

Step	Command	Description

1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter remote RC952-FEE1 configuration mode
3	Interface eth	Enter the Ethernet interface configuration mode of remote RC952FEE1
4	shutdown	Shutdown the Ethernet interface
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fee1
raisecom(config-RC952FEE1/1)# interface eth 1
raisecom(config-RC952FEE1/1-eth)#shutdown
raisecom(config-RC952FEE1/1-eth)#show interface

5.3.2.3. Auto negotiation conifiguration of remote RC952-FEE1 Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter remote RC952-FEE1 configuration mode
3	Interface ethernet	Enter the Ethernet interface configuration mode of remote RC952FEE1
4	speed auto	Enable the auto negotiation function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fee1
raisecom(config-RC952FEE1/1)# interface ethernet 1
raisecom(config-RC952FEE1/1-eth)#speed auto
raisecom(config-RC952FEE1/1-eth)#show interface

5.3.2.4. Speed and duplex configuration of remote RC952-FEE1 Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter remote RC952-FEE1

Step	Command	Description
		configuration mode
3	Interface ethernet	Enter the Ethernet interface configuration mode of remote RC952FEE1
4	Speed (100|10) duplex (full|half))	Configure the speed and duplex mode of Ethernet interface. Speed: 10M or 100M Duplex: half or full duplex
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fee1
raisecom(config-RC952FEE1/1)# interface ethernet 1
raisecom(config-RC952FEE1/1-eth)#speed 10 duplex half
raisecom(config-RC952FEE1/1-eth)#show interface

5.3.2.5. Flow control configuration of remote RC952-FEE1 Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fee1 <1-16>	Enter remote RC952-FEE1 configuration mode
3	Interface ethernet	Enter the Ethernet interface configuration mode of remote RC952FEE1
4	flow-control (on|off)	Enable or disable the flow control function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fee1
raisecom(config-RC952FEE1/1)# interface ethernet 1
raisecom(config-RC952FEE1/1-eth)# flow-control on
raisecom(config-RC952FEE1/1-eth)#show interface

5.3.3. Monitoring and maintenance

In the Ethernet interface configuration mode of remote RC952FEE1 use **show interface** command to check the Ethernet status and configuration

raisecom(config-RC952FEE1/1-eth)#show interface
Port 1:RC952FEE1
    Basic Info:
        Port:Disable
        Linkstatus:Down
        Autonegotiation:disable
        speed-duplex: 10M-half
        flowcontrol:OFF
    Config Info:
        Port:Disable
        Speed:10M
        Duplex:half
        flowcontrol:OFF

Ethernet Performance Statistics:
        TX Packet Number:0
        RX Packet Number:0
        RX Error Packet Number:0

6. Configuration of remote RC952-FXE1

6.1. Basic configuration of remote RC952-FXE1

- Remote RC952-FXE1 configuration list
- Step by step introduction of remote RC952-FXE1 configuration list
- Monitoring and maintenance

6.1.1. Remote RC952-FXE1 configuration list

• Reset remote RC952-FXE1 (reset)

6.1.2. Step by step introduction of remote RC952-FXE1 configuration list

6.1.2.1. Reset remote RC952-FXE1

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fxe1 <1-16>	Enter remote RC952FXE1 configuration mode
3	reset	Reset remote RC952-FXE1
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc952fxe1 1
raisecom(config-RC952FXE1/1)# reset
raisecom(config-RC952FXE1/1)#show interface

6.1.3. Monitoring and maintenance

In remote RC952-FXE1 mode use **show device** command to check the status and configuration information of RC952-FXE1.

raisecom(config-RC952FXE1/1)#show device
        Device 1:RC952FXE1

Basic Running Info:
        Management Operation Status:Slave
        version:A.0-0.0-E0
        Optical Module Type:noexist

6.2. E1 interface configuration of remote RC952-FXE1

This chapter introduces how to configure the E1 interface configuration of remote RC952-FXE1.

- Remote RC952-FXE1 E1 interface configuration list
- Step by step introduction of remote RC952-FXE1 E1 interface configuration list
- Monitoring and maintenance

6.2.1. Remote RC952-FXE1 E1 interface configuration list

- Clock mode configuration: master or slave (clock-mode(master|slave))
- Enable or disable CRC function (crc-auto (enable|disable))

6.2.2. Step by step introduction of remote RC952-FXE1 E1 interface configuration list

6.2.2.1. Clock mode configuration: master clock or slave clock

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fxe1 <1-16>	Enter remote RC952FXE1 configuration mode
3	Interface e1	Enter E1 interface configuration mode of remote RC952FXE1
4	clock-mode(master|slave)	Configure the clock mode as master clock or slave clock mode
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc952fxe1 1
raisecom(config-RC952FXE1/1)# interface e1
raisecom(config-RC952FXE1/1-E1)# clock-mode master
raisecom(config-RC952FXE1/1-E1)#show interface

6.2.2.2. Enable or disable CRC function

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fxe1 <1-16>	Enter remote RC952FXE1 configuration mode
3	Interface e1	Enter E1 interface configuration mode of remote RC952FXE1
4	Crc-auto (enable|disable)	Enable or disable CRC function
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc952fxe1 1

raisecom(config-RC952FXE1/1)#interface e1

raisecom(config- RC952FXE1/1-E1))#crc enable

raisecom(config-RC952FXE1/1-E1)#show interface

6.2.3. Monitoring and maintenance

In E1 interface configuration mode of remote RC952FXE1 use **show interface** command to check the status and configuration of remote RC952-FXE1 E1 interface.

RAISECOM(config-RC952FXE1/1-E1)# show interface

Port 1:RC952FXE1

Basic Running Info:

Clock-mode:slave

Frame Mode:framed

Frame timeslot:0

Frame CRC autonegotiation:disable

Frame CRC Check:disable

Basic Config Info:

Clock-mode:slave

Frame Mode:unframed

Frame timeslot:N/A

Frame CRC autonegotiation:disable

Packet Statistics:

TX Packet Number:0

RX Packet Number:0

RX Error Packet Number:0

Fault State:
LOS:Normal
AIS:Normal
LOF:Normal
CRC:Normal

6.3. Ethernet interface configuration of remote RC952-FXE1

This chapter introduces how to configure the Ethernet interface of remote RC952-FXE1, including the following parts:

- Remote RC952-FXE1 Ethernet configuration list
- Step by step introduction of remote RC952-FXE1 Ethernet configuration list
- Monitoring and maintenance

6.3.1. Remote RC952-FXE1 Ethernet configuration list

- Flow control configuration on remote RC952-FXE1 Etherent interface (flow-control (on|off))

6.3.2. Step by step introduction of remote RC952-FXE1 Ethernet interface

6.3.2.1. Flow control configuration on remote RC952-FXE1 Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc952fxe1 <1-16>	Enter remote RC952FXE1 configuration mode
3	Interface fx-ethernet	Enter Ethernet configuration mode of remote RC952FXE1
4	flow-control (on|off)	Enable or disable the flow control function on the Ethernet interface

| 5 | show interface | Show configuration information |

raisecom#config

raisecom(config)# remote rc952fxe1

raisecom(config-RC952FXE1/1)# interface fx-ethernet

raisecom(config-RC952FXE1/1-eth)# flow-control on

raisecom(config-RC952FXE1/1-eth)#show interface

6.3.3. Monitoring and maintenance

In Ethernet interface configuration mode, use show interface command to check the status and configuration of the Ethernet.

raisecom(config-RC952FXE1/1-eth)#show interface

Port 1:RC952FXE1

Basic Info:

Tx Link:Down

Rx Link:Down

flowcontrol:OFF

Config Info:

flowcontrol:OFF

Ethernet Performance Statistics:

TX Packet Number:0

RX Packet Number:0

RX Error Packet Number:0

7. Configuring remote RC953-FE8E1

7.1. Basic configuration of remote RC953-FE8E1

- Remote RC953-FE8E1 configuration list
- Step by step introduction of remote RC953-FE8E1 configuration list
- Monitoring and maintenance

7.2. Remote RC953-FE8E1 basic configuration list

- Fault-pass-through function configuration (fault-pass (enable|disable))
- Reset remote RC953-FE8E1 (reset)
- Error bit auto shutdown ([no] err-auto-shutdown)

7.2.1. Step by step introduction of remote RC953-FE8E1 configuration list

7.2.1.1. Fault-pass-through function configuration

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953-FE8E1 configuration mode
3	fault-pass (enable|disable)	Enable or disable the fault-pass-through function
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# fault-pass enable
raisecom(config-RC953FE8E1/1)#show interface

7.2.1.2. Reset remote RC953-FE8E1

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953-FE8E1 configuration mode
3	reset	Reset RC953-FE8E1
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# reset
raisecom(config-RC953FE8E1/1)#show interface

7.2.1.3. Error bit auto shutdwon

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953-FE8E1 configuration mode
3	err-auto-shutdown	Eanble the error bit auto shutdown function, that is to say, the transmission channel will be shutdown automatically if the total error bit exceeds the threshold.
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# err-auto-shutdown
raisecom(config-RC953FE8E1/1)#show interface

7.2.2. Monitoring and maintenance

In remote RC953-FE8E1 configuration mode, use show device command to check the status and configuration information of remote RC953-FE8E1

raisecom(config-RC953FE8E1/2)#show device
Device 2:RC953FE8E1-BL
Power Type: AC 220V
    Basic Running Info:

Management Operation Status:Slave

version:A.1-1.0-E1.0

Optical Module Type:noexist

Fault Pass:enable

Basic Config Info:

Fault Pass:enable

7.3. Remote RC953-FE8E1 E1 interface configuration

This chapter introduces how to configure remote RC953-FE8E1 E1 interface, including the following part:

- Remote RC953-FE8E1 E1 interface configuration list
- Step by step introduction of remote RC953-FE8E1 E1 interface configuration list
- Monitoring and maintenance

7.3.1. Remote RC953-FE8E1 E1 interface configuration list

- Clock mode configuration (clock-mode(master|slave))
- Enable or disable CRC function (crc-auto (enable|disable))

7.3.2. Step by step introduction of

7.3.2.1. Clock mode configuration

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953FE8E1 configuration mode
3	Interface e1 <1-8>	Enter E1 interface c onfiguration mode of remote RC953FE8E1 式
4	clock-mode(master|slave)	Configure the clock mode as master clock or slave clock
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe8e1 1

raisecom(config-RC953FE8E1/1)# inter face e1 1

raisecom(config- RC953FE8E1/1-E1/1)#clock-mode master

raisecom(config- RC953FE8E1/1-E1/1)#show interface

7.3.2.2. Enable or disable CRC function

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953FE8E1 confiugraiton mode
3	Interface e1 <1-8>	Enter E1 interface confiugraiton mode of RC953FE8E1
4	Crc-auto (enable|disable)	Enable or disable CRC function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# inter face e1 1
raisecom(config- RC953FE8E1/1-E1/1)#crc-auto enable
raisecom(config- RC953FE8E1/1-E1/1)#show interface

7.3.3. Monitoring and maintenance

In interface E1 configuration mode of remote RC953-FE8E1, use show interface command to check the status and configuration information of RC953-FE8E1 E1 interface

Raisecom(config-RC953FE8E1/1-E1/1)# show interface
Device 1:RC953FE8E1   E1port-1
Basic Running Info:
Clock Mode:master
Frame Mode:framed
Frame timeslot:0-31
Frame CRC autonegotiation:enable
Frame CRC Check:enable
Basic Config Info:
Clock Mode:master
Frame Mode:unframed
Frame timeslot:N/A
Frame CRC autonegotiation:enable

Packet Statistics:
TX Packet Number:0
RX Packet Number:7
RX Error Packet Number:0

Fault State:

LOS:Normal
AIS:Normal
LOF:Normal
CRC:Normal

7.4. Remote RC953-FE8E1 Ethernet interface configuration

This chapter introduces how to configure the Ethernet interface of remote RC953-FE8E1, including the following parts:

- Remote RC953-FE8E1 Ethernet interface configuration list
- Step by step introduction of remote RC953-FE8E1 Ethernet interface configuration list
- Monitoring and maintenance

7.4.1. Remote RC953-FE8E1 Ethernet interface configuration list

- Enable the Ethernet interface (no shutdown))
- Shutdown Ethernet interface (shutdown)
- Auto negotiation configuration   (speed auto)
- Speed and duplex configuration of Ethernet interface (speed (10|100) duplex (full|half))
- Flow control configuration (flow-control (on|off))

7.4.2. Step by step introduction of remote RC953-FE8E1 Ethernet interface configuration list

7.4.2.1. Enable the Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953FE8E1 configuration mode
3	Interface eth	Enter Ethernet interface configuration mode of remote RC953FE8E1
4	no shutdown	Enable the Ethernet interface
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# interface eth
raisecom(config-RC953FE8E1/1-eth)# no shutdown
raisecom(config-RC953FE8E1/1-eth)#show interface

7.4.2.2. Shutdown the Ethernet interface

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953FE8E1 configuration mode
3	Interface eth	Enter Ethernet interface configuration mode of remote RC953FE8E1
4	Shutdown	Shutdown Ethernet interface
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fe8e1 1
raisecom(config-RC951FE8E1/1)# interface eth 1
raisecom(config-RC951FE8E1/1-eth)#shutdown
raisecom(config-RC951FE8E1/1-eth)#show interface

7.4.2.3. Auto negotiation configuraiton

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953FE8E1 configuration mode
3	Interface ethernet	Enter Ethernet interface configuration mode of remote RC953FE8E1
4	speed auto	Start auto negotiation function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# interface ethernet 1
raisecom(config-RC953FE8E1/1-eth)#speed auto

raisecom(config-RC953FE8E1/1-eth)#show interface

7.4.2.4. Ethernet interface speed and duplex configuration

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953FE8E1 configuration mode
3	Interface ethernet	Enter Ethernet interface configuration mode of remote RC953FE8E1
4	Speed (100|10) duplex (full|half))	Configure the speed and duplex of Ethernet interface
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# interface ethernet 1
raisecom(config-RC953FE8E1/1-eth)#speed 10 duplex half
raisecom(config-RC953FE8E1/1-eth)#show interface

7.4.2.5. Flow control configuration

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe8e1 <1-16>	Enter remote RC953FE8E1 configuration mode
3	Interface ethernet	Enter Ethernet interface configuration mode of remote RC953FE8E1
4	flow-control (on|off)	Enable or disable flow control function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fe8e1 1
raisecom(config-RC953FE8E1/1)# interface ethernet 1
raisecom(config-RC953FE8E1/1-eth)# flow-control on
raisecom(config-RC953FE8E1/1-eth)#show interface

7.4.3. Monitoring and maintenance

In interface Ethernet configuration mode of remote RC953-FE8E1, use show interface command to check the Ethernet status and configuration information.

```
raisecom(config-RC953FE8E1/2-ethernet)#show interface
Device 2:RC953FE8E1-BL
    Basic Info:
        Port:Enable
        Linkstatus:Down
        Autonegotiation:enable
        speed-duplex: 10M-half
        flowcontrol:OFF
    Config Info:
        Port:Enable
        Speed:Autonegotiation
        flowcontrol:OFF

    Ethernet Performance Statistics:
        TX Packet Number:700
        RX Packet Number:0
        RX Lost Packet Number:0
```

8. Configuring remote RC953-FX8E1

8.1. Basic configuration of remote RC953-FX8E1

This chapter introduces how to configure remote RC953-FX8E1, incuding the following parts:

- Remote RC953-FX8E1 basic configuration list
- Step by step introduction of remote RC953-FX8E1 configuration list
- Monitoring and maintenance

8.1.1. Remote RC953-FX8E1 basic configuration list

- Reset RC953-FX8E1 (reset)
- Error bit auto shutdown ([no] err-auto-shutdown)

8.1.2. Step by step introduction of remote RC953-FX8E1 basic

configuration list

8.1.2.1. Reset RC953-FX8E1

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx8e1 <1-16>	Enter remote RC953FX8E1 configuration mode
3	reset	Reset the device
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fx8e1 1
raisecom(config-RC953FX8E1/1)# reset
raisecom(config-RC953FX8E1/1)#show interface

8.1.2.2. Error bit auto shutdown

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fx8e1 <1-16>	Enter remote RC953FX8E1 configuration mode
3	err-auto-shutdown	Eanble the error bit auto shutdown function, that is to say, the transmission channel will be shutdown automatically if the total error bit exceeds the threshold.
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fx8e1 1
raisecom(config-RC953FX8E1/1)# err-auto-shutdown
raisecom(config-RC953FX8E1/1)#show interface

8.1.3. Monitoring and maintenance

In remote RC953-FX8E1 configuration mode, use show device command to check the status and configuration information of RC953-FX8E1:

raisecom(config-RC953FX8E1/1)#show device
Device 1:RC953FX8E1
Power Type: DC 24V
Basic Running Info:
Management Operation Status:Slave
version:A.1-1.1-E0.0
Optical Module Type:SS25
E1 Error Auto Shutdown:disable
Basic Config Info:
E1 Error Auto Shutdown:disable

8.2. Remote RC953-FX8E1 E1 interface configuration

This chapter introduces how to configure remote RC953-FX8E1 E1 interface, including the following parts:
- Remote RC953-FX8E1 E1 interface configuration list
- Step by step introduction of remote RC953-FX8E1 interface configuration list

- Monitoring and maintenance

8.2.1. Remote RC953-FX8E1 E1 interface configuration list

- Configuring the clock mode (clock-mode(master|slave))
- Enable or disable CRC function (crc-auto (enable|disable))

8.2.2. Step by step introduction of remote RC953-FX8E1 E1 interface configuration list

8.2.2.1. Configuring the clock mode of remote RC953-FX8E1 E1 interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx8e1 <1-16>	Enter remote RC953FX8E1 confiugration mode
3	Interface e1 <1-8>	Enter E1 interface configuration mode of remote RC953FX8E1
4	clock-mode(master|slave)	Configure the clock mode of E1 interface as master or slave clock mode
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fx8e1 1
raisecom(config-RC953FX8E1/1)# interface e1 1
raisecom(config-RC953FX8E1/1-E1/1)# clock-mode master
raisecom(config-RC953FX8E1/1-E1/1)#show interface

8.2.2.2. Enable or disable CRC function of remote RC953-FX8E1 E1 interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx8e1 <1-16>	Enter remote RC953FX8E1 confiugration mode
3	Interface e1 <1-8>	Enter E1 interface configuration mode of remote RC953FX8E1
4	Crc-auto (enable|disable)	Enable or disable CRC function
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fx8e1 1

raisecom(config-RC953FX8E1/1)#interface e1 1

raisecom(config- RC953FX8E1/1-E1/1))#crc enable

raisecom(config-RC953FX8E1/1-E1/1)#show interface

8.2.3. Monitoring and maintenance

In interface E1 configuration mode of remote RC953-FX8E1, use show interface command to check the status and configuration information of E1 interface:

raisecom(config-RC953FX8E1/1-E1/1)#show interface

Device 1:RC953FX8E1   E1port-1

Basic Running Info:

Clock Mode:master

Frame Mode:framed

Frame timeslot:0-31

Frame CRC autonegotiation:enable

Frame CRC Check:enable

Basic Config Info:

Clock Mode:master

Frame Mode:framed

Frame timeslot:0-31

Frame CRC autonegotiation:enable

Packet Statistics:

TX Packet Number:0

RX Packet Number:98

RX Error Packet Number:1

Fault State:

LOS:Normal

AIS:Normal

LOF:Normal

CRC:Normal

8.3. Configuring remote RC953-FX8E1 Ethernet interface

This chapter introduces how to configure the Ethernet interface of remote RC953-FX8E1

and includes the following parts:
- Remote RC953-FX8E1 Ethernet interface configuration list
- Step by step introduction of remote RC953-FX8E1 Ethernet interface configuration list
- Monitoring and maintenance

8.3.1. Remote RC953-FX8E1 Ethernet interface configuration list

•Flow control configuration (flow-control (on|off))

8.3.2. Step by step introduction of remote RC953-FX8E1 Ethernet interface configuration list

8.3.2.1. Flow control configuration

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx8e1 <1-16>	Enter RC953FX8E1 configuration mode
3	Interface fx-ethernet	Enter interface Ethernet configuration mode of remote RC953FX8E1
4	flow-control (on|off)	Enable or disable flow control function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fx8e1
raisecom(config-RC953FX8E1/1)# interface fx-ethernet
raisecom(config-RC953FX8E1/1-eth)# flow-control on
raisecom(config-RC953FX8E1/1-eth)#show interface

8.3.3. Monitoring and maintenance

In interface Ethernet configuration mode of remote RC953-FX8E1, use show interface command to check the status and configuration information of the Ethernet interface.

raisecom(config-RC953FX8E1/1-fxethernet)show interface
Device 1:RC953FX8E1
    Basic Info:

Tx Link:UP
Rx Link:UP
flowcontrol:OFF
Config Info:
flowcontrol:OFF

Ethernet Performance Statistics:
TX Packet Number:811
RX Packet Number:0
RX Lost Packet Number:0

Tx Link:UP
Rx Link:UP

9. Configuring remote RC953-FE4E1

9.1. Basic configuration of remote RC953-FE4E1

This chapter introduces how to configure remote RC953-FE4E1 and includes the following parts:

- Remote RC953-FE4E1 configuration list
- Step by step introduction of remote RC953-FE4E1 configuration list
- Monitoring and maintenance

9.1.1. Remote RC953-FE4E1 configuration list

- Enable and disable fault-pass-through function (fault-pass (enable|disable))
- Reset remote RC953-FE4E1 (reset)
- Error bit auto shutdown ([no] err-auto-shutdown)

9.1.2. Step by step

9.1.2.1. Enable or disable fault-pass-through function

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953-FE4E1 configuration mode
3	fault-pass (enable|disable)	Enable or diable fault-pass-through function
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fe4e1 1
raisecom(config-RC953FE4E1/1)# fault-pass enable
raisecom(config-RC953FE4E1/1)#show interface

9.1.2.2. Reset remote RC953-FE4E1

Step	Command	Description

1	Config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953-FE4E1 configuration mode
3	reset	Reset the device
4	show interface	Show configuration information

raisecom#config

raisecom(config)# Remote rc953fe4e11

raisecom(config-RC953FE4E1/1)# reset

raisecom(config-RC953FE4E1/1)#show interface

9.1.2.3. Error bit auto shutdown

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953-FE4E1 configuration mode
3	err-auto-shutdown	Eanble the error bit auto shutdown function, that is to say, the transmission channel will be shutdown automatically if the total error bit exceeds the threshold.
4	show interface	Show configuration information

raisecom#config

raisecom(config)# Remote rc953fe4e11

raisecom(config-RC953FE4E1/1)# err-auto-shutdown

raisecom(config-RC953FE4E1/1)#show interface

9.1.3. Monitoring and maintenance

In remote RC953-FE4E1 configuration mode, use show device command to check the status and configuration information of the device.

raisecom(config-RC953FE4E1/2)#show device

Device 2:RC953FE4E1

Power Type: DC 24V

Basic Running Info:

Management Operation Status:Slave

version:A.0-1.0-E0.0

Optical Module Type:noexist

Fault Pass:disable

E1 Error Auto Shutdown:disable

Basic Config Info:

Fault Pass:disable

E1 Error Auto Shutdown:disable

9.2. Configuring remote RC953-FE4E1 E1 interface

This chapter introduces how to configure the E1 interface of remote RC953-FE4E1 and includes the following parts:

- Remote RC953-FE4E1 E1 interface configuration list
- Step by step introduction of remote RC953-FE4E1 E1 interface configuration list
- Monitoring and maintenance

9.2.1. Remote RC953-FE4E1 E1 interface configuration list

- Configuring the clock mode (clock-mode(master|slave))
- Enable or disable CRC function (crc-auto (enable|disable))

9.2.2. Step by step introduction of remote RC953-FE4E1 E1 interface configuration list

9.2.2.1. Configuring the clock mode of E1 interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter RC953FE4E1 configuration mode
3	Interface e1 <1-4>	Enter interface E1 configuration mode of RC953FE4E1
4	clock-mode(master|slave)	Configure the clock mode as master or slave clock mode
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe4e1 1

raisecom(config)# interface e1 1

raisecom(config-RC953FE4E1/1-E1/1)# clock-mode master

raisecom(config- RC953FE4E1/1-E1/1)#show interface

9.2.2.2. Enable or disable CRC function

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter RC953FE4E1 configuration mode
3	Interface e1 <1-4>	Enter interface E1 configuration mode of RC953FE4E1
4	Crc-auto (enable|disable)	Enable or disable CRC function
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe4e1 1

raisecom(config)# interface e1 1

raisecom(config-RC953FE4E1/1-E1/1)#crc enable

raisecom(config- RC953FE4E1/1-E1/1)#show interface

9.2.3. Monitoring and maintenance

In interface E1 configuration mode of remote RC953-FE4E1, use show interface command to check the status and configuration information of the device.

raisecom(config-RC953FE4E1/1-E1/1)#show interface

Device 1:RC953FE4E1   E1port-1

Basic Running Info:

Clock Mode:master

Frame Mode:framed

Frame timeslot:0-31

Frame CRC autonegotiation:enable

Frame CRC Check:enable

Basic Config Info:

Clock Mode:master

Frame Mode:unframed

Frame timeslot:N/A

Frame CRC autonegotiation:enable

Packet Statistics:

TX Packet Number:0

RX Packet Number:7
RX Error Packet Number:0

Fault State:
LOS:Normal
AIS:Normal
LOF:Normal
CRC:Normal

9.3. Configuring remote RC953-FE4E1 Ethernet interface

This chapter introduces how to configure the Ethernet interface of remote RC953-FE4E1 and includes the following parts:

- Remote RC953-FE4E1 Ethernet interface configuration list
- Step by step introduction of remote RC953-FE4E1 Ethernet interface configuration list
- Monitoring and maintenance

9.3.1. Remote RC953-FE4E1 Ethernet interface configuration list

- Enable the Ethernet interface (no shutdown))
- Shutdown the Ethernet interface (shutdown)
- Start the auto negotiation function (speed auto)
- Ethernet interface speed and duplex configuration (speed (10|100) duplex (full|half))
- Flow control configuration (flow-control (on|off))

9.3.2. Step by step introduction of remote RC953-FE4E1 Ethernet interface configuration list

9.3.2.1. Enable the Ethernet interface

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953FE4E1 configuration mode
3	Interface eth	Enter interface Ethernet configuration mode of RC953FE4E

4	no shutdown	Enabe the Ethernet interface
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe4e1

raisecom(config-RC953FE4E1/1)# interface eth

raisecom(config-RC953FE4E1/1-eth)# no shutdown

raisecom(config-RC953FE4E1/1-eth)#show interface

9.3.2.2. Shutdown the Ethernet interface

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953FE4E1 configuration mode
3	Interface eth	Enter interface Ethernet configuration mode of RC953FE4E
4	Shutdown	Shutdown the Ethernet interface
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe4e1

raisecom(config-RC951FE4E1/1)# interface eth 1

raisecom(config-RC951FE4E1/1-eth)#shutdown

raisecom(config-RC951FE4E1/1-eth)#show interface

9.3.2.3. Start the auto negotiation

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953FE4E1 configuration mode
3	Interface ethernet	Enter interface Ethernet configuration mode of RC953FE4E
4	speed auto	Start the auto negotiation function
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe4e1
raisecom(config-RC953FE4E1/1)# interface ethernet 1
raisecom(config-RC953FE4E1/1-eth)#speed auto
raisecom(config-RC953FE4E1/1-eth)#show interface

9.3.2.4. Ethernet interface speed and duplex configuration

Step	Command	Description
1	Config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953FE4E1 configuration mode
3	Interface ethernet	Enter interface Ethernet configuration mode of RC953FE4E
4	Speed (100|10) duplex (full|half))	Configure the speed of Ethernet interface to 10M or 100M; configure the duplex as full duplex or half duplex
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fe4e1
raisecom(config-RC953FE4E1/1)# interface ethernet 1
raisecom(config-RC953FE4E1/1-eth)#speed 10 duplex half
raisecom(config-RC953FE4E1/1-eth)#show interface

9.3.2.5. Enable or disable flow control

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fe4e1 <1-16>	Enter remote RC953FE4E1 configuration mode
3	Interface ethernet	Enter interface Ethernet configuration mode of RC953FE4E
4	flow-control (on|off)	Enable or disable flow control function on the Ethernet interface
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fe4e1

raisecom(config-RC953FE4E1/1)# interface ethernet 1

raisecom(config-RC953FE4E1/1-eth)# flow-control on

raisecom(config-RC953FE4E1/1-eth)#show interface

9.3.3. Monitoring and maintenance

In interface Ethernet configuration mode, use show interface command to check the status and configuration information of the Ethernet interface.

raisecom(config-RC953FE4E1/2-ethernet)#show interface

Device 2:RC953FE4E1

 Basic Info:

  Port:Enable

  Linkstatus:Down

  Autonegotiation:enable

  speed-duplex: 10M-half

  flowcontrol:OFF

 Config Info:

  Port:Enable

  Speed:Autonegotiation

  flowcontrol:OFF

Ethernet Performance Statistics:

  TX Packet Number:16777215

  RX Packet Number:5570560

  RX Lost Packet Number:0

10.   Configuring remote RC953-FX4E1

10.1. Remote RC953-FX4E1 basic configuration

This chapter introduces how to configure remote RC953-FX4E1 and includes the following parts:

- Remote RC953-FX4E1 basic configuration list
- Step by step introduction of remote RC953-FX4E1 configuration list
- Monitoring and maintenance

10.1.1. Remote RC953-FX4E1 basic configuration list

- Reset the remote device (reset)
- Error bit auto shutdown ([no] err-auto-shutdown)

10.1.2. Step by step introduction of remote RC953-FX4E1 configuration list

10.1.2.1. Reset the remote device

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx4e1 <1-16>	Enter remote RC953FX4E1 configuration mode
3	reset	Reset remote RC953-FX4E1
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fx4e1 1
raisecom(config-RC953FX4E1/1)# reset
raisecom(config-RC953FX4E1/1)#show interface

10.1.2.2. Error bit auto shutdown

Step	Command	Description
1	Config	Enter global configuration mode

2	Remote rc953fx4e1 <1-16>	Enter remote RC953FX4E1 configuration mode
3	err-auto-shutdown	Eanble the error bit auto shutdown function, that is to say, the transmission channel will be shutdown automatically if the total error bit exceeds the threshold.
4	show interface	Show configuration information

raisecom#config
raisecom(config)# Remote rc953fx4e11
raisecom(config-RC953FX4E1/1)# err-auto-shutdown
raisecom(config-RC953FX4E1/1)#show interface

10.1.3. Monitoring and maintenance

In remote RC953-FX4E1 configuration mode, use show device command to check the status and configuration information of remote RC953-FX4E1.

raisecom(config-RC953FX4E1/1)#show device
    Device 1:RC953FX4E1
    Power Type: DC 24V
        Basic Running Info:
            Management Operation Status:Slave
            version:A.1-1.1-E0.0
            Optical Module Type:SS25
            E1 Error Auto Shutdown:disable
        Basic Config Info:
            E1 Error Auto Shutdown:disable

10.2. Remote RC953-FX4E1 E1 interface configuration

This chapter introduces how to configure the E1 interface of remote RC953-FEX4E1 and includes the following part:
- Remote RC953-FX4E1 E1 interface configuration list
- Step by step introduction of remote RC953-FX4E1 E1 interface configuration list
- Monitoring and maintenance

10.2.1. Remote RC953-FX4E1 E1 interface configuration list

• Configuring the clock mode (clock-mode(master|slave))
• Enable or disable CRC function (crc-auto (enable|disable))

10.2.2. Step by step introduction of remote RC953-FX4E1 E1 interface

configuration list

10.2.2.1. Configuring the clock mode

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx4e1 <1-16>	Enter remote RC953-FX4E1 configuration mode
3	Interface e1 <1-4>	Enter interface E1 configuration mode of remote RC953-FX4E1
4	clock-mode(master|slave)	Configure the clock mode as master or slave clock
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fx4e1 1
raisecom(config-RC953FX4E1/1)# interface e1 1
raisecom(config-RC953FX4E1/1-E1/1)# clock-mode master
raisecom(config-RC953FX4E1/1-E1/1)#show interface

10.2.2.2. Enable or disable CRC function

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx4e1 <1-16>	Enter remote RC953-FX4E1 configuration mode
3	Interface e1 <1-4>	Enter interface E1 configuration mode of remote RC953-FX4E1
4	Crc-auto (enable|disable)	Enable or disable CRC function
5	show interface	Show configuration information

raisecom#config

raisecom(config)# remote rc953fx4e1 1

raisecom(config-RC953FX4E1/1)#interface e1 1

raisecom(config- RC953FX4E1/1-E1/1))#crc enable

raisecom(config-RC953FX4E1/1-E1/1)#show interface

10.2.3. Monitoring and maintenance

In interface E1 configuration mode of remote RC953-FX4E1, use show interface command to check the status and configuration information of the E1 interface.

raisecom(config-RC953FX4E1/1-E1/1)#show interface

Device 1:RC953FX4E1   E1port-1

Basic Running Info:

Clock Mode:master

Frame Mode:framed

Frame timeslot:0-31

Frame CRC autonegotiation:enable

Frame CRC Check:enable

Basic Config Info:

Clock Mode:master

Frame Mode:framed

Frame timeslot:0-31

Frame CRC autonegotiation:enable

Packet Statistics:

TX Packet Number:0

RX Packet Number:98

RX Error Packet Number:1

Fault State:

LOS:Normal

AIS:Normal

LOF:Normal

CRC:Normal

10.3. Configuring remote RC953-FX4E1 Ethernet interface

This chapter introduces how to configure the Ethernet interface of remote RC953-FX4E1 and includes the following parts:

- Remote RC953-FX4E1 Ethernet interface configuration list
- Step by step introduction of remote RC953-FX4E1 Ethernet interface configuration list
- Monitoring and maintenance

10.3.1. Remote RC953-FX4E1 Ethernet interface configuration list

•Configuring the flow control function (flow-control (on|off))

10.3.2. Step by step introduction of remote RC953-FX4E1 Ethernet interface configuration list

10.3.2.1. Configuring the flow control

Step	Command	Description
1	config	Enter global configuration mode
2	Remote rc953fx4e1 <1-16>	Enter remote RC953-FX4E1 configuration mode
3	Interface fx-ethernet	Enter interface Ethernet configuration mode of remote RC953FX4E1
4	flow-control (on|off)	Enable or disable flow control function
5	show interface	Show configuration information

raisecom#config
raisecom(config)# remote rc953fx4e1
raisecom(config-RC953FX4E1/1)# interface fx-ethernet
raisecom(config-RC953FX4E1/1-eth)# flow-control on
raisecom(config-RC953FX4E1/1-eth)#show interface

10.3.3. Monitoring and maintenance

In interface Ethernet configuration mode of remote RC953-FX4E1, use show interface command to check the status and configuration information of RC953-FX4E1.

raisecom(config-RC953FX4E1/1-fxethernet)show interface
Device 1:RC953FX4E1
    Basic Info:
        Tx Link:UP

Rx Link:UP
flowcontrol:OFF
Config Info:
flowcontrol:OFF

Ethernet Performance Statistics:
TX Packet Number:811
RX Packet Number:0
RX Lost Packet Number:0

11.   Configurating the map of RC953-8FE16E1

This chapter introduces how to configure the map of RC953-8FE16E1 and includes the following parts:

- Map overview
- Map configuration list
- Step by step introduction of map configuration list
- Monitoring and maintenance

11.1. Map overview

Map configuration includes three parts:

1. Configuring channel: a channel consists of one or more E1 lines for the inverse multiplexing. Ethernet data is transimitted by the channel. There are 16 E1 of RC953-8FE16E1, please remember that E1 lines in a single channel should be the combination of the first 8 E1 lines (1-8) or the second E1 lines (9-16).
2. Configurating trunk: there can be more than one Ethernet interfaces in the trunk interface for the redundant Ethernet access.
3. Configuring map: Ethernet interface and trunk interface can be mapped with a channel to realize the Ethernet data transmission.

11.2. Map configuration list

- Create a channel(add channel <1-16> e1 {1-8})
        (add channel <1-16> e1 {9-16})
- Delete a channel(no channel <1-16>)
- Create a trunk interface (add trunk ethernet {1-8})
- Delete a trunk interface (no trunk)
- Create a map for an Ethernet interface (add map NAME ethernet {1-8} [trunk] [channel {1-16}])
- Modify a map for an Ethernet interface (modify map NAME ethernet {1-8} [trunk] [channel {1-16}])
- Create a map for a trunk interface (add map NAME trunk [channel {1-16}])
- Modify a map for a trunk interface (modify map NAME trunk [channel {1-16}])
- Delete a map for a trunk interface (no map NAME)

11.3. Step by step introduction of map configuration list

11.3.1. Create a channel

Command	Description
Config	Enter global configuration mode
add channel <1-16> e1 {1-8}	Create a channel
add channel <1-16> e1 {9-16}	● E1 lines in a single channel should be the combination of the first 8 E1 (1-8) or the second E1 (9-16)
	● 1-16 indicates there can be 16 channel at most
show map	Show map congiration information.

Raisecom#config
raisecom(config)#add channel 2 e1 9-16
set command successfully.
if you want to save it, please execute "write" to save!
raisecom(config)#show map

11.3.2. Delete a channel

Command	Description
Config	Enter global configuration mode
No channel <1-16>	Delete a channel
show map	Show map configuration information

Raisecom#config
raisecom(config)#no channel 2
set command successfully.
if you want to save it, please execute "write" to save!
raisecom(config)#show map

11.3.3. Create a trunk

Command	Description
Config	Enter global configuration mode
add trunk ethernet {1-8}	Create a trunk interface
	1-8 indicates Ethernet interface number
show map	Use show map command to check the turnk configuration information

Raisecom#config
Raisecom(config)#add trunk ethernet 2-5
Raisecom(config)#show map

11.3.4. Delete a trunk

Command	Description
Config	Enter global configuration mode
No trunk	Delete a trunk interface
show map	Use show map command to check trunk interface configuration information

Raisecom#config
Raisecom(config)#no trunk
Raisecom(config)#show map

11.3.5. Create a map

Command	Description
config	Enter global configuration mode
add map NAME ethernet {1-8} [trunk] [channel {1-16}]	Create a map between the channel and Ethernet interface/trunk interface.
add map NAME trunk [channel {1-16}]	*1-8 indicates the number of Ethernet interface *9-16 indicates the number of channel number
show map	Show map configuration information

Raisecom#config
Raisecom(config)#add map aaa ethernet 6   trunk channel 1-2
Raisecom(config)#show map

11.3.6. Modify a map configuration

Command	Description
config	Enter global configuration mode
modify map NAME ethernet {1-8} [trunk] [channel {1-16}]	You can use this command to modify the map between a channel and Ethernet interface/trunk interface.
modify map NAME trunk [channel {1-16}]	*1-8 indicates the number of Ethernet interface *9-16 indicates the number of channel number

Show map	Show map

     Raisecom#config
     Raisecom(config)#modify map aaa ethernet 6 channel 1
     Raisecom(config)#show map

11.3.7. Delete a map

Command	Description
config	Enter global configuration mode
no map NAME	Delete a map
show map	Show map configuration information.

     Raisecom#config
     Raisecom(config)#no map aaa
     Raisecom(config)#show map

11.4. Monitoring and maintenance

In global configuration mode, use show map command to check the map configuration information.

     raisecom(config)#show map

Channel	E1 List	E1 Linked	Err-AutoShutdown
1	1-8	1-8	disable
2	9-16	n/a	disable

TRUNK:	Ethernet List
	2-5

Name	Ethernet List	Channel List	Trunk List
aaa	6	1,2	include

12.   Configuring loop back detection

This chapter introduces how to configure the loop back function on E1 interface and Ethernet interface, including the following parts:
- Loop back detection overview
- Loop back detection configuration list
- Step by step introduction of loop back test configuration list
- Monitoring and maintenance

12.1. Loop back detection overview

Loop back detection function can avoid the loop introduces by E1 interfaces or Ethernet interfaces.

12.2. Loop back detection configuration list

- Configuring the loop back detection of E1 interfaces (loopback-detection (enable|disable)   e1-port-list ({1-16}|all))
- Configuring the loop back detection of Etherent interface (loopback-detection (enable|disable)   ethernet-port-list ({1-8}|all))
- Configuring the loop back detection of trunk interface (loopback-detection (enable|disable) trunk-port)

12.3. Step by step introduction of loop back test

configuration list

12.3.1. Configuring the loop back detection of E1 interfaces

Step	Command	Description
1	config	Enter global configuration mode
2	loopback-detection (enable|disable) e1-port-list ({1-16}|all)	设置 E1 口端口环回自测
3	show loopback-detection (ethernet|e1|trunk)	Show configuration information

raisecom#config

raisecom(config)#loopback-detection enable   e1-port-list 1-16

raisecom(config)# show loopback-detection e1

12.3.2. Configuring the loop back detection of Etherent interface

Step	Command	Description
1	config	Enter global configuration mode
2	loopback-detection (enable|disable) ethernet-port-list ({1-8}|all)	Enable or disable the loop back detection of a particular Ethernet interface
3	show loopback-detection (ethernet|e1|trunk)	Show configuration information

raisecom#config

raisecom(config)# loopback-detection enable   ethernet-port-list 1-5

raisecom(config)# show loopback-detection ethernet

12.3.3. Configuring the loop back detection of trunk interface

Step	Command	Description
1	config	Enter global configuration mode
2	loopback-detection (enable|disable) trunk-port	Enable the loop back detection of trunk interface
3	show loopback-detection (ethernet|e1|trunk)	Show configuration information

raisecom#config

raisecom(config)# loopback-detection enable   trunk-port

raisecom(config)# show loopback-detection trunk

4.2 Monitoring and maintenance

In global configuration mode, use show loopback-detection command to check the loop back status of E1 interface, Ethernet interface and trunk interface:

Show the E1 interface loop back status:

raisecom(config)#show loopback-detection e1

E1 port:1

    Config State:enable

    Running State:No Loop

E1 port:2

    Config State:enable

    Running State:No Loop

E1 port:3

    Config State:enable

    Running State:No Loop

E1 port:4

    Config State:enable

    Running State:No Loop

E1 port:5

    Config State:enable

    Running State:No Loop

E1 port:6

    Config State:enable

    Running State:No Loop

E1 port:7

    Config State:enable

    Running State:No Loop

E1 port:8

    Config State:enable

    Running State:No Loop

E1 port:9

    Config State:enable

    Running State:No Loop

E1 port:10

    Config State:enable

    Running State:No Loop

E1 port:11

    Config State:enable

    Running State:No Loop

E1 port:12

    Config State:enable

    Running State:No Loop

E1 port:13

    Config State:enable

    Running State:No Loop

E1 port:14

    Config State:enable

    Running State:No Loop

E1 port:15

        Config State:enable
        Config State:enable
        Running State:No Loop
E1 port:9
        Config State:enable
        Running State:No Loop
E1 port:10
        Config State:enable
        Running State:No Loop
E1 port:11
        Config State:enable
        Running State:No Loop
E1 port:12
        Config State:enable
        Running State:No Loop
E1 port:13
        Config State:enable
        Running State:No Loop
E1 port:14
        Config State:enable
        Running State:No Loop
E1 port:15
        Config State:enable

Show the Ethernet interface loop back status:
raisecom(config)#show loopback-detection ethernet
Ethernet port 1:
        Config State:enable
        Running State:No Loop
Ethernet port 2:
        Config State:enable
        Running State:No Loop
Ethernet port 3:
        Config State:enable
        Running State:No Loop
Ethernet port 4:
        Config State:enable
        Running State:No Loop
Ethernet port 5:
        Config State:enable
        Running State:No Loop
Ethernet port 6:
        Config State:enable
        Running State:No Loop

Ethernet port 7:
    Config State:enable
    Running State:No Loop   74
Ethernet port 8:
    Config State:enable
    Running State:No Loop

Show the trunk interface loop back status:

raisecom(config)#show loopback-dection trunk-port
Trunk Port:
    Config State:enable
    Running State:No Loop

13.   Configuring the network management interface

This chapter introduces how to configure the network management interface, including the following parts:

- Network management interface overview
- Network management interface configuration list
- Step by step introduction of network management interface configuration list
- Monitoring and maintenance

13.1. Network management interface overview

There are 8 Ethernet interfaces of RC953-8FE16E1, any of the 8 interfaces can be a network management interface for the SNMP management and Telnet management.

13.2. Network management interface configuration list

Configure one of the 8 Ethernet interfaces as a network management interface (mgmt-port <1-8>)
Shutdown the network management interface (no mgmt-port <1-8>)

13.3. Step by step introduction of network management interface configuration list

13.3.1. Configure one of the 8 Ethernet interfaces as a network management interface

Command	Description
config	Enter global configuration mode
mgmt-port <1-8>	Configure one of the 8 Ethernet interfaces as a network management interface
show interface ethernet [{1-8}]	Show the status of the Ethernet interface

Raisecom#config
Raisecom(config)#mgmt-port 1

Raisecom(config)#show interface ethernet

13.3.2. Shutdown the network management interface

Command	Description
config	Enter global configuration mode
no mgmt-port <1-8>	Shutdown the network management Ethernet interface
show interface ethernet [{1-8}]	Show the status of the Ethernet interface

Raisecom#config
Raisecom(config)#no mgmt-port 1
Raisecom(config)#show interface ethernet

13.4. Monitoring and maintenance

In global configuration mode, use show interface Ethernet command to check the status and configuration information of Ethernet interfaces.

Raisecom(config)#show interface ethernet 1
Port 1:
Basic Info:
Linkstatus:down
speed-duplex: 10M-half
Manage port:On
Config Info:
Port Switch:On
Auto negotiate:enable
auto-MDIX:enable
flowcontrol:ON

Performance Statistics:
TX Packet Number:0
TX Bytes Number:0
RX Packet Number:0
RX Bytes Number:0
RX Lost Packet Number:0
Collision Number:0

14.   Configuring the SNMP

This chapter introduces how to configure SNMP of RC953-8FE16E1 and includes the following parts:

- SNMP configuration list
- Step by step introduction of SNMP configuration list
- Monitoring and maintenance

14.1. SNMP configuration lis

- Configuring the community name
- Enble and disable TRAP function
- Configuring the TRAP server address and the port number
- Delete a trap server
- Delete all trap configurations
- Configuring the CONTACT information
- Configuring the LOCATION information
- Configuring the NAME information
- Configuring the description information

14.2. Step by step introduction of SNMP configuration list

14.2.1. Configuring the community name

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server community COMMUNITY (ro|rw)	Configuring the community name. * ro indicate read only *rw indicate read and write
3	show snmp	Show SNMP configuration information

raisecom#snmp
raisecom(config-SNMP)# Snmp-server   community   public ro
raisecom(config-SNMP)# show snmp

14.2.2. Enable and disable TRAP function

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server trap (enable|disable)	Enable or disable TRAP function
3	show snmp	Show SNMP configuration information

raisecom#snmp

raisecom(config-SNMP)# Snmp-server trap   enable

raisecom(config-SNMP)# show snmp

14.2.3. Configuring TRAP server address and the TRAP port number

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server trap <1-8> target A.B.C.D port <1-65536>	Configuring the TRAP serve address and the TRAP port number 1-8: the trap server number and there can be 8 trap servers A.B.C.D: IP address of TRAP server 1-65536: port number of the TRAP
3	show snmp	Show SNMP configuration information

raisecom#snmp

raisecom(config-SNMP)# Snmp-server   trap   1 target 192.168.1.1 port 162

raisecom(config-SNMP)# show snmp

14.2.4. Delete the trap server

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	no Snmp-server trap <1-8>	Delete a trap server

| 3 | show snmp | Show SNMP configuration information |

raisecom#snmp
raisecom(config-SNMP)# no Snmp-server trap 1
raisecom(config-SNMP)# show snmp

14.2.5. Clear all trap configuration

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server trap clear	Clear all trap configuration
3	show snmp	Show SNMP configuration information

raisecom#snmp
raisecom(config-SNMP)# Snmp-server trap clear
raisecom(config-SNMP)# show snmp

14.2.6. Configuring the CONTACT information

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server contact STRING	Configuring the CONTACT information
3	show snmp	Show SNMP configuration information

raisecom#snmp
raisecom(config-SNMP)# Snmp-server contact STRING
raisecom(config-SNMP)# show snmp

14.2.7. Configuring the LOCATION information

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server location	Configuring the LOCATION

	LOCATION	information	
3	show snmp	Show SNMP configuration information	

raisecom#snmp

raisecom(config-SNMP)# Snmp-server location haidian

raisecom(config-SNMP)# show snmp

14.2.8. Configuring NAME information

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server name NAME	Configuring NAME information
3	show snmp	Show SNMP configuration information

raisecom#snmp

raisecom(config-SNMP)# Snmp-server name RAISECOM

raisecom(config-SNMP)# show snmp

14.2.9. Configuring description information

Step	Command	Description
1	snmp	Enter SNMP configuration mode
2	Snmp-server description STRING	Configuring description information
3	show snmp	Show SNMP configuration information

raisecom#snmp

raisecom(config-SNMP)# Snmp-server description RAISECOM

raisecom(config-SNMP)# show snmp
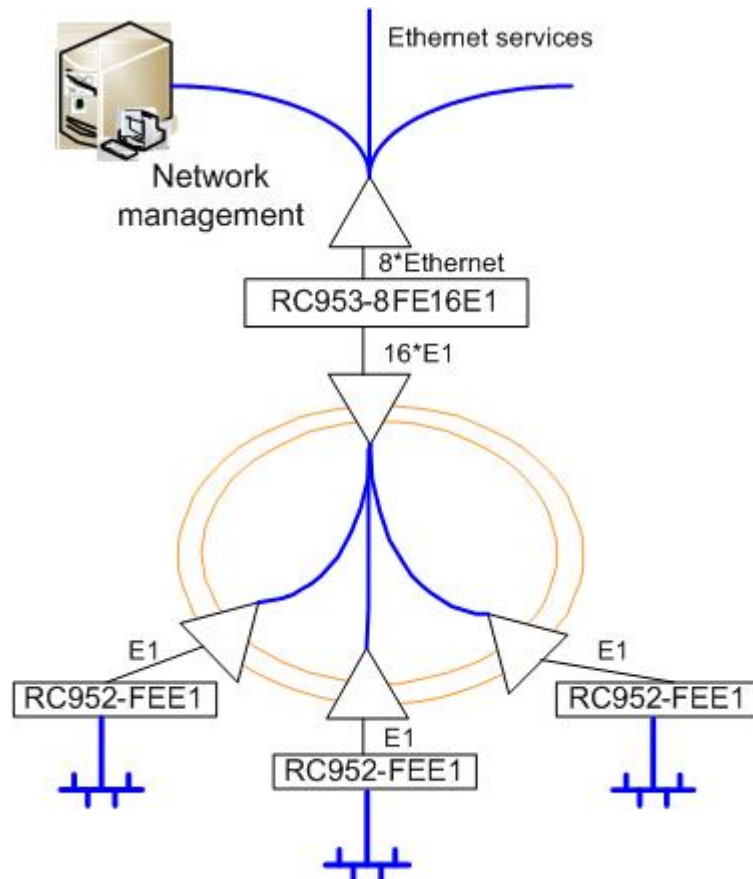
snmp-server description STRING

14.3. Monitoring and maintenance

In global configuration mode, use show snmp command to check the status and configuration information of SNMP.

```
raisecom(config)# show snmp
    System name:       unknown
    System description:        RC953-8FE16E1
    System contact:       unknown
    System location:        unknown
    System object id: 1.3.6.1.4.1.8886.2
    Read Community:public
    Write Community:private
    Send trap status:      Enable
    Trap sink      Target Address      Target Port
              1              0.0.0.0              162
              2              0.0.0.0              162
              3              0.0.0.0              162
              4              0.0.0.0              162
              5              0.0.0.0              162
              6              0.0.0.0              162
              7              0.0.0.0              162
              8              0.0.0.0              162
```

15.   Hub-and-spoke application of RC953-8FE16E1

and RC952-FEE1

Hub-and-spoke application of RC953-8FE16E1 and RC952-FEE1

15.1.   Application configuration:

The first Ethernet interface is network management interface, there are thress RC952-FEE1 in remote sites. The Ethernet services of the three remote sites will be aggregated in the second Ethernet interface of RC953-8FE16E1.

Command lines:
1.   Configure the IP address and gateway of RC953-8FE16E1:
raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#ip 192.168.4.64 mask 255.255.255.0

set command success

please execute "write" to save!

raisecom(config)# gateway 192.168.4.1

set command success

please execute "write" to save!

raisecom(config)#show ip

IP   Addr: 192.168.4.64

subnet   Mask: 255.255.255.0

GATEWAY Addr: 192.168.4.1

raisecom(config)#write

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

Copy OK: 2699 bytes copied

Successfully write to flash

raisecom(config-SNMP)#end

raisecom#

2.   Configure the SNMP community and TRAP server

raisecom#config

Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#snmp

raisecom(config-SNMP)#snmp-server community public ro

set command success

please execute "write" to save!

raisecom(config-SNMP)#snmp-server community private rw

set command success

please execute "write" to save!

raisecom(config-SNMP)#snmp-server trap 1 target 192.168.4.63 port 162

set command success

please execute "write" to save!

raisecom(config-SNMP)#show snmp

System name: unknown

System description: RC953-8FE16E1

System contact: unknown

System location: unknown

System object id: 1.3.6.1.4.1.8886.2

Read Community:public

Write Community:private

Send trap status: Enable

Trap sink	Target Address	Target Port
1	192.168.4.63	162
2	0.0.0.0	162

3	0.0.0.0	162
4	0.0.0.0	162
5	0.0.0.0	162
6	0.0.0.0	162
7	0.0.0.0	162
8	0.0.0.0	162

raisecom(config－SNMP)#write

Writing running-config to flash, please wait...
Copy OK: 2699 bytes copied

Successfully write to flash
raisecom(config-SNMP)#end
raisecom#

3. Configure the first Ethernet interface as management interface
raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
raisecom(config)#mgmt-port 1
set command success
if you want to save it, please execute "write" to save!
raisecom(config)#write

Writing running-config to flash, please wait...
Copy OK: 2699 bytes copied

Successfully write to flash
raisecom(config)#end
raisecom#

4. Configure the map: configure a map between Ethernet interface 2 and E1 interface
    1, 2 and 3. Data from E1 1, 2 and 3 can be transmitted to Ethernet interface 2 and
    data of E1 1, 2 and 3 isseparated from each other.

raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
raisecom(config)#add map map1 ethernet 2 e1 1-3
set command success.
if you want to save it, please execute "write" to save!
raisecom(config)#show map

| Name | Ethernet List | E1 List |
| map1 | 2 | 1-3 |

raisecom(config)#write

Writing running-config to flash, please wait...
Copy OK: 2699 bytes copied

Successfully write to flash
raisecom(config)#end
raisecom#

5.   Configure the Etherenet interface
raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
raisecom(config)#int ethernet 2
raisecom(config-ethernet-2)#speed auto
set command success
if you want to save it, please execute "write" to save!
raisecom(config-ethernet-2)#flow-control on
set command success
if you want to save it, please execute "write" to save!
raisecom(config-ethernet-2)#show int
Port 2:
      Basic Info:
            Linkstatus:down
            speed-duplex: 10M-half
            Manage port:Off
      Config Info:
            Port Switch:On
            Auto negotiate:enable
            auto-MDIX:enable
            flowcontrol:ON

Performance Statistics:
            TX Packet Number:0
            TX Bytes Number:0
            RX Packet Number:0
            RX Bytes Number:0
            RX Lost Packet Number:0
            Collision Number:0
raisecom(config-ethernet-2)#write

Writing running-config to flash, please wait...
Copy OK: 2699 bytes copied

Successfully write to flash
raisecom(config-ethernet-2)#end
raisecom#

6. Configure E1 inteface

raisecom#config

Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#interface e1 1

raisecom(config-E1/1)#clock-mode master

set command success

if you want to save it, please execute "write" to save!

raisecom(config-E1/1)#crc-auto enable

set command success

if you want to save it, please execute "write" to save!

raisecom(config-E1/1)#flow-control on

set command success

if you want to save it, please execute "write" to save!

raisecom(config-E1/1)#show int

E1:1

    Basic Info:

        Clock-mode:master

        Frame Mode:unframed

        Frame timeslot:n/a

        Frame CRC State:disable

        Frame CRC Autonegotiation:enable

        Flow control:ON

    Maintenance:

        Loop Back(config):disable

        Lineloop(config):disable

        Bert:disable

    Packet Statistics:

        TX Packet Number:81384

        RX Packet Number:0

        RX Error Packet Number:0

    Performance Statistics:

        Error Second:0

        Serial Error Second:0

        Bit Error Rate: Zero

    Fault State:

        LOS:Failure

        AIS:Normal

        LOF:Normal

        CRC:Normal

raisecom(config-E1/1)#write

Writing running-config to flash, please wait...
Copy OK: 2699 bytes copied

Successfully write to flash

raisecom(config-E1/1)#end
raisecom#

7. Test E1 interface

raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
Start the loop back detection of remote E1
raisecom(config-E1/1)# remote-e1-loopback
set command success
Enable BERT function
raisecom(config-E1/1)#bert enable
set command success
raisecom(config-E1/1)#show int
E1:1
    Basic Info:
        Clock Mode:master
        Frame Mode:unframed
        Frame timeslot:n/a
        Frame CRC State:disable
        Frame CRC Autonegotiation:enable
        Flow control:ON

    Maintenance:
        Loop Back(config):disable
        Lineloop(config):enable
        Lineloop(result):Success
        Bert:enable

    Packet Statistics:
        TX Packet Number:0
        RX Packet Number:0
        RX Error Packet Number:0

    Performance Statistics:
        Error Second:15
        Serial Error Second:15
        Bit Error Rate: thousandth

Fault State:

LOS:Failure

AIS:Normal

LOF:Normal

CRC:Normal

Disable BERT function and loop back function

raisecom(config-E1/1)#bert disable

set command success

raisecom(config-E1/1)#no remote-e1-loopback

set command success

Enble local loop back

raisecom(config-E1/1)#loopback

set command success

Enable BERT function

raisecom(config-E1/1)#bert enable

set command success

raisecom(config-E1/1)#show int

E1:1

Basic Info:

Clock Mode:master

Frame Mode:unframed

Frame timeslot:n/a

Frame CRC State:disable

Frame CRC Autonegotiation:enable

Flow control:ON

Maintenance:

Loop Back(config):disable

Lineloop(config):enable

Lineloop(result):Success

Bert:enable

Packet Statistics:

TX Packet Number:0

RX Packet Number:0

RX Error Packet Number:0

Performance Statistics:

Error Second:15

Serial Error Second:15

Bit Error Rate: thousandth

Fault State:

LOS:Failure
AIS:Normal
LOF:Normal
CRC:Normal
Disabel BERT function
raisecom(config-E1/1)#bert disable
set command success

Disable local loop back
raisecom(config-E1/1)#no loopback
set command success

raisecom(config-eth/1)#end
raisecom#

8. Configure the three remote RC952-FEE1(the configuration of the three equipments are the same)
raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
raisecom(config)#remote interfaceconvert 1
raisecom(config-RC952FEE1/1)#

Enable fault-pass-through function
raisecom(config-RC952FEE1/1)#fault-pass enable
set command success
if you want to save it, please execute "write" to save!

Enter interface Ethernet configuration mode of remote RC952-FEE1:
raisecom(config-RC952FEE1/1)#interface ethernet
raisecom(config-RC952FEE1/1-ethernet)#
Start auto negotiation function:
raisecom(config-RC952FEE1/1-ethernet)#speed auto
set command success
if you want to save it, please execute "write" to save!
Enable flow control:
raisecom(config-RC952FEE1/1-ethernet)#flow-control on
set command success
if you want to save it, please execute "write" to save!
Show Ethernet status of remote RC952-FEE1:
raisecom(config-RC952FEE1/1-ethernet)#show interface
Port 1:RC952FEE1
Basic Info:
Port:Enable
Linkstatus:Down
Autonegotiation:enable

speed-duplex: 10M-half

flowcontrol:ON

Config Info:

Port:Enable

Speed:Autonegotiation

flowcontrol:ON

Ethernet Performance Statistics:

TX Packet Number:81

RX Packet Number:0

RX Error Packet Number:0

raisecom(config-RC952FEE1/1-ethernet)#exit

raisecom(config-RC952FEE1/1)#

Enter interface E1 configuration mode of remote RC952-FEE1:

raisecom(config-RC952FEE1/1)#interface e1

raisecom(config-RC952FEE1/1-E1)#

Configure the clock mode as master clock mode:

raisecom(config-RC952FEE1/1-E1)#clock-mode master

set command success

if you want to save it, please execute "write" to save!

Enable CRC function:

raisecom(config-RC952FEE1/1-E1)#crc-auto enable

set command success

if you want to save it, please execute "write" to save!

Show E1 interface status:

raisecom(config-RC952FEE1/1-E1)#show interface

Port 1:RC952FEE1

Basic Running Info:

Clock Mode:master

Frame Mode:unframed

Frame timeslot:N/A

Frame CRC autonegotiation:enable

Frame CRC Check:disable

Basic Config Info:

Clock Mode:master

Frame Mode:unframed

Frame timeslot:N/A

Frame CRC autonegotiation:enable

Packet Statistics:

TX Packet Number:0

RX Packet Number:143

RX Error Packet Number:0

Fault State:

      LOS:Normal

      AIS:Normal
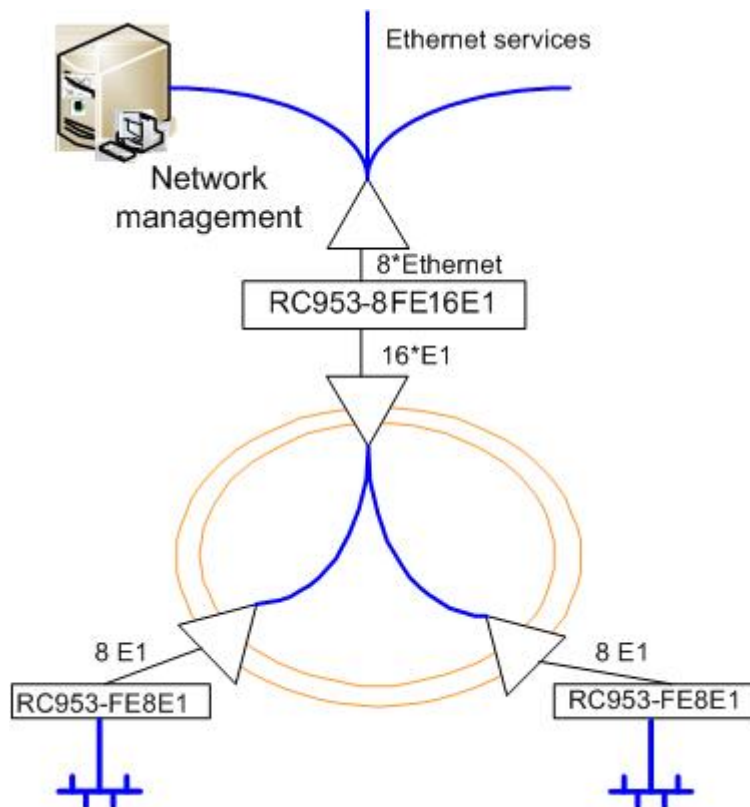
      LOF:Normal

      CRC:Normal

raisecom(config-RC952FEE1/1-E1)#end

raisecom(config)#

16.   Hub-and-spoke application of RC953-8FE16E1

and RC953-FE8E1

This chapter introduces the application of RC953-8FE16E1 and RC953-FE8E1, this application enables a flexible way for costumers who require more than E1 transmission capacity in the remotes.

16.1.   Application configurations:

The first Ethernet interface of RC953-8FE16E1 is network management interface. There are two RC953-FE8E1 in remotes and communicate with 1-8 E1 and 9-16 E1 of RC953-8FE16E1 seperately. The Ethernet services of the two remote sites will be aggregated in the second Ethernet interface of RC953-8FE16E1.
In this application, the two remote site can have 8 E1 (16M) bandwidth for data transmission.

    Command lines:
 1.   Configure the IP address and gateway of RC953-8FE16E1
   raisecom#config

Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#ip 192.168.4.64 mask 255.255.255.0

set command success

please execute "write" to save!

raisecom(config)# gateway 192.168.4.1

set command success

please execute "write" to save!

raisecom(config)#show ip

IP   Addr: 192.168.4.64

subnet   Mask: 255.255.255.0

GATEWAY Addr: 192.168.4.1

raisecom(config)#write

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

Copy OK: 2699 bytes copied

Successfully write to flash

raisecom(config-SNMP)#end

raisecom#

2.   Configure the SNMP community and TRAP server

raisecom#config

Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#snmp

raisecom(config-SNMP)#snmp-server community public ro

set command success

please execute "write" to save!

raisecom(config-SNMP)#snmp-server community private rw

set command success

please execute "write" to save!

raisecom(config-SNMP)#snmp-server trap 1 target 192.168.4.63 port 162

set command success

please execute "write" to save!

raisecom(config-SNMP)#show snmp

System name: unknown

System description: RC951-8FE16E1

System contact: unknown

System location: unknown

System object id: 1.3.6.1.4.1.8886.2

Read Community:public

Write Community:private

Send trap status: Enable

Trap sink   Target Address   Target Port

          1   192.168.4.63   162

2	0.0.0.0	162
3	0.0.0.0	162
4	0.0.0.0	162
5	0.0.0.0	162
6	0.0.0.0	162
7	0.0.0.0	162
8	0.0.0.0	162

raisecom(config－SNMP)#write

Writing running-config to flash, please wait...
Copy OK: 2699 bytes copied

Successfully write to flash
raisecom(config-SNMP)#end
raisecom#

3.   Configure the first Ethernet interface as network management interface
raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
raisecom(config)#mgmt-port 1
set command success
if you want to save it, please execute "write" to save!
raisecom(config)#write

Writing running-config to flash, please wait...
Copy OK: 2699 bytes copied

Successfully write to flash
raisecom(config)#end
raisecom#

4.   Confgure channel and the map (1-8 E1 belong to a channel and 9-16 E1 belong to
     another channel. Map Etherent interface 2 and the two channels)
raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
raisecom(config)#add channel 1 e1 1-8
set command successfully.
if you want to save it, please execute "write" to save!
raisecom(config)#add channel 2 e1 9-16
set command successfully.
if you want to save it, please execute "write" to save!
raisecom(config)#add map map1 ethernet 2 channel 1,2
set command success.
raisecom(config)#show map

Channel	E1 List	E1 Linked	Err-AutoShutdown
1	1-8	n/a	disable
2	9-16	n/a	disable

TRUNK: Ethernet List
                        n/a

Name	Ethernet List	Channel List	Trunk List
map1	2	1,2	exclude

raisecom(config)#write

Writing running-config to flash, please wait...
Copy OK: 4732 bytes copied

Successfully write to flash
raisecom(config)#end
raisecom#

5.   Configure Ethernet interface
raisecom#config
Configuration mode, one command input per times. End with CTRL-Z.
raisecom(config)#int ethernet 2
raisecom(config-ethernet/2)#speed auto
set command success
if you want to save it, please execute "write" to save!
raisecom(config-ethernet/2)#flow-control on
set command success
if you want to save it, please execute "write" to save!
raisecom(config-ethernet/2)#
raisecom(config-ethernet/2)#show interface
Etherent Port 2:
    Basic Info:
        Linkstatus:down
        speed-duplex: 10M-half
        Manage port:Off
    Config Info:
        Port Switch:On
        Auto negotiate:enable
        auto-MDIX:enable
        flowcontrol:ON

Performance Statistics:
        TX Packet Number:0
        TX Bytes Number:0

      RX Packet Number:0

      RX Bytes Number:0

      RX Lost Packet Number:0

      Collision Number:0

raisecom(config-ethernet/2)#write

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

Copy OK: 4731 bytes copied

Successfully write to flash

raisecom(config-ethernet/2)#end

raisecom#

Configure E1 interface

raisecom#config

Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#interface e1 1

raisecom(config-E1/1)#clock-mode master

set command success

if you want to save it, please execute "write" to save!

raisecom(config-E1/1)#crc-auto enable

set command success

if you want to save it, please execute "write" to save!

raisecom(config-E1/1)#flow-control on

set command success

if you want to save it, please execute "write" to save!

raisecom(config-E1/1)#show int

E1:1

  Basic Info:

    Description:unknown

    Clock Mode:master

    Frame Mode:framed

    Frame timeslot:0-31

    Frame CRC State:enable

    Frame CRC Autonegotiation:enable

    Flow control:ON

  remote deviceID:1 remote E1ID:N/A

  Maintenance:

    Loopback(config):disable

    remote-e1-loopback(config):disable

    Bert:disable

  Packet Statistics:

TX Packet Number:0

RX Packet Number:0

RX Error Packet Number:0

Performance Statistics:

Error Second:0

Serious Error Second:0

Bit Error Rate: Zero

Fault State:

LOS:Normal

AIS:Normal

LOF:Normal

CRC:Normal

GIDERR:Normal

raisecom(config-E1/1)#write

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

Copy OK: 4730 bytes copied

Successfully write to flash

raisecom(config-E1/1)#end

raisecom#

Test E1 interface

raisecom#config

Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#interface e1 1

Enable remote E1 loop back

raisecom(config-E1/1)#remote-e1-loopback

set command success

Enable BERT function

raisecom(config-E1/1)#bert enable

set command success

raisecom(config-E1/1)#show int

E1:1

Basic Info:

Description:unknown

Clock Mode:master

Frame Mode:framed

Frame timeslot:0-31

Frame CRC State:enable

Frame CRC Autonegotiation:enable

Flow control:ON

remote deviceID:1   remote E1ID:N/A

Maintenance:

Loopback(config):disable

remote-e1-loopback(config):enable

remote-e1-loopback(result):Success

Bert:enable

Packet Statistics:

TX Packet Number:0

RX Packet Number:0

RX Error Packet Number:0

Performance Statistics:

Error Second:15

Serious Error Second:15

Bit Error Rate: thousandth

Fault State:

LOS:Normal

AIS:Normal

LOF:Normal

CRC:Normal

GIDERR:Normal

Disable remote E1 loop back and BERT, enable local loop back

raisecom(config-E1/1)#bert disable

set command success

raisecom(config-E1/1)#no remote-e1-loopback

set command success

Before enabling local E1 loop back, please make sure that all E1 cables are disconnected.

raisecom(config-E1/1)#loopback

before set loopback to this E1, be sure all E1s

of the channel that this E1 belonged to is NOT

linked with the remote interface-converter!!!

are you still go on?

Please input 'yes' or 'y' to confirm, others to cancel:y

set command success

Enable BERT function

raisecom(config-E1/1)#bert enable

set command success

raisecom(config-E1/1)#show int

E1:1

Basic Info:

Description:unknown

Clock Mode:master

Frame Mode:framed

Frame timeslot:0-31

Frame CRC State:disable

Frame CRC Autonegotiation:enable

Flow control:ON

remote deviceID:1   remote E1ID:N/A

Maintenance:

Loopback(config):enable

Loopback(result):Success

remote-e1-loopback(config):disable

Bert:enable

Packet Statistics:

TX Packet Number:0

RX Packet Number:0

RX Error Packet Number:0

Performance Statistics:

Error Second:15

Serious Error Second:15

Bit Error Rate: thousandth

Fault State:

LOS:Failure

AIS:Normal

LOF:Normal

CRC:Normal

GIDERR:Normal

Disable BERT function

raisecom(config-E1/1)#bert disable

set command success

Disable local E1 loop back

raisecom(config-E1/1)#no loopback

set command success

raisecom(config-eth/1)#end

raisecom#

Configure remote RC953-FE8E1

raisecom#config

Configuration mode, one command input per times. End with CTRL-Z.

raisecom(config)#remote interfaceconvert 1
raisecom(config-RC953FE8E1/1)#

Enable the error bit auto shutdown function
raisecom(config-RC953FE8E1/1)#err-auto-shutdown
set command success
if you want to save it, please execute "write" to save!

Enter interface Ethernet configuration mode of remote RC953-FE8E1
raisecom(config-RC953FE8E1/1)#interface fe-ethernet
raisecom(config-RC953FE8E1/1-feeth)#
Enable flow control function
raisecom(config-RC953FE8E1/1-feeth)#flow-control on
set command success
if you want to save it, please execute "write" to save!
Check Ethernet interface status:
raisecom(config-RC953FE8E1/1-feeth)#show int
Device 1:RC953FE8E1
    Basic Info:
        Tx Link:Down
        Rx Link:Down
        flowcontrol:OFF
    Config Info:
        flowcontrol:ON

Ethernet Performance Statistics:
        TX Packet Number:88
        RX Packet Number:0
        RX Lost Packet Number:0
raisecom(config-RC953FE8E1/1-feeth)#exit
raisecom(config-RC953FE8E1/1)#

Configure E1 interface
Enter E1 interface configuration mode of remote RC953-FE8E1
raisecom(config-RC953FE8E1/1)#interface e1 1
raisecom(config-RC953FE8E1/1-E1/1)#
Configure the clock mode:
raisecom(config-RC953FE8E1/1-E1/1)#clock-mode master
set command success
if you want to save it, please execute "write" to save!
Enable CRC function:
raisecom(config-RC953FE8E1/1-E1/1)#crc-auto enable
set command success
if you want to save it, please execute "write" to save!

Show E1 interface status
raisecom(config-RC953FE8E1/1-E1/1)#show int
Device 1:RC953FE8E1   E1port-1
    Basic Running Info:
        Clock Mode:master
        Frame Mode:framed
        Frame timeslot:0-31
        Frame CRC autonegotiation:enable
        Frame CRC Check:enable
    Basic Config Info:
        Clock Mode:master
        Frame Mode:framed
        Frame timeslot:0-31
        Frame CRC autonegotiation:enable

    Packet Statistics:
        TX Packet Number:0
        RX Packet Number:22
        RX Error Packet Number:0

    Fault State:
        LOS:Normal
        AIS:Normal
        LOF:Normal
        CRC:Normal
raisecom(config-RC953FX8E1/1-E1/1)#write

Writing running-config to flash, please wait...
Copy OK: 4726 bytes copied

Successfully write to flash
raisecom(config-RC953FX8E1/1-E1/1)#exit
raisecom(config-RC953FX8E1/1)#