

NetView Network Management for BD-SDH63

User Guide

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V3.00	2018-3	Primarily Released
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Contents

CHAPTER 1 OVERVIEW	4
1.1 INTRODUCTION	4
1.2 FEATURE	4
1.3 CLIENT/SERVER STRUCTURE	4
CHAPTER 2 INSTALLATION AND LOGIN	6
2.1 INSTALLATION	6
2.2 LOGIN	6
CHAPTER 3 BASIC OPERATION	7
3.1 CREATE SUBNET	7
3.2 CREATE NE	7
3.3 DELETE SUBNET	8
3.4 DELETE NE	9
3.5 TCP/IP COMMUNICATION	9
3.6 USER GROUP MANAGEMENT	10
3.6.1 New user group and group restriction	10
3.6.2 Edit restriction of user group	10
3.7 USER MANAGEMENT	11
3.7.1 New user and user restriction	11
3.7.2 Edit user restriction	11
3.8 LOG VIEWER	11
CHAPTER 4 BD-SDH63 FUNCTIONAL MODULES	13
4.1 RACK DIAGRAM MANAGER	13
4.2 CREATE DXC	13
4.3 OPTICAL PORT	16
4.3.1 Enable /Disable port	16
4.3.2 View Optical interface information	17
4.3.3 ALS Configuration	17
4.4 E1 PORT	18
4.4.1 E1 loop	18
4.4.2 BERT testing	19
4.5 CONFIGURE CLOCK	20
4.5.1 Clock mode Configuration	20
4.5.2 Clock PRI Configuration	21
4.5.3 Frequency offset overrun switch	22
4.5.4 Reference restoring time	22
4.5.5 ETS(external timing source) config	22
4.5.6 SSM config	23
4.5.7 View the current clock status	23
4.6 CALENDAR CALIBRATE	24
4.7 KLM	25
4.8 DATA COMMUNICATION CHANNEL	26
4.9 EXM/ETS	27

CHAPTER 5 ALARM AND PERFORMANCE	29
5.1 ALARM MANAGMENT	29
5.1.1 Alarm Severity	29
5.1.2 Alarm shield	29
5.1.3 Protection	30
5.1.4 Alarm View	30
5.1.5 Alarm Advanced Config	31
5.2 PERFORMANCE MANAGEMENT	33
5.3 DATA DUMP	33

Chapter 1 Overview

1.1 Introduction

NetView network management system is developed to manage the BD-SDH63 equipments; it adopts Client/Server structure, supports SNMP protocol; it performs excellent management to the network such as resource management, configuration management, alarm management, performance management and security management, which is compliant to ITU-T Recommendation. With its intuitively clear Graphical User Interface (GUI), the network operator can master NetView system easily in a short time.

This document is intended to instruct in the basics of NetView software installation, operation and maintenance. It is proper to Network Maintenance Engineer, Network Planning Designer, Equipment Commissioning Engineer and etc.

1.2 Feature

- Intuitively clear Graphical User Interface (GUI)
- Intelligible DXC configuration interface
- Client/Server structure
- Simple Network Management Protocol (SNMP)
- Ethernet management interface for network management
- Performs resource, configuration, alarm, performance and security management specified in ITU-T recommendation
- Overall management for local and remote equipment
- Real-time monitoring device interface status and quality of traffic transmission
- Remote Power Down detection (RPD) for fault location
- Perfect alarm and performance statistic

1.3 Client/Server Structure

NetView software is of 3 layers Client/ Server structure, see Figure 1-3-1:

According to Figure 1-3-1, NetView software is divided into 3 parts:

- ✧ Object application layer(Client terminal GUI object);
- ✧ Service object layer (Object module);
- ✧ Object resource layer (Device and Database);

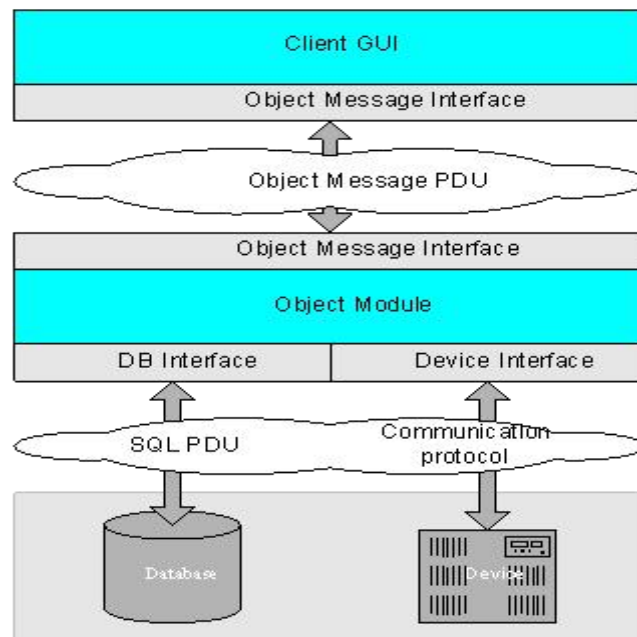


Figure 1-3-1 C/S Structure

The functional description of the three layers is as follows:

✧ Object application layer

The object application layer provides user operation interface window, which is the typical "thin client", to deal with the window display, window alternation operation and the display logic related closely to the window operation, etc.; the client terminal adopts Java interface.

✧ Service object layer

The service object layer equals to "middleware" service layer, consists of middleware service management process and managed object (MO). This layer aim to complete the information transmission between network/NE resource and client terminal.

✧ Object resource layer

This layer is composed of 3 parts:

a. NE real resource

in the system, the NE real resource is provided by Proxy of NE gateway. The Proxy can implement the information transmission between the associated NEs by internal addressing protocol.

b. NE resource mapping

store a copy of data that is the same as the NE configuration data by database, called NE resource mapping; the database also stores the network resource data and NE history alarm for querying.

c. Network resource

Network resource refers to the relationship attribute between NEs, such as network topology relationship, link channel of end-to end, and etc. Generally, the information of this part is stored in network management database.

Chapter 2 Installation and Login

2.1 Installation

Steps

System installation should be followed as the step below:

(Note: Make sure that all the firewall is closed before the installation)

- Step1 Start the setup program
- Step2 Load installation wizard
- Step3 Select installation directory
- Step4 Copy file
- Step5 Confirm installation completed
- Step6 Start server automatically
- Step7 Start client terminal manually

2.2 Login

Steps

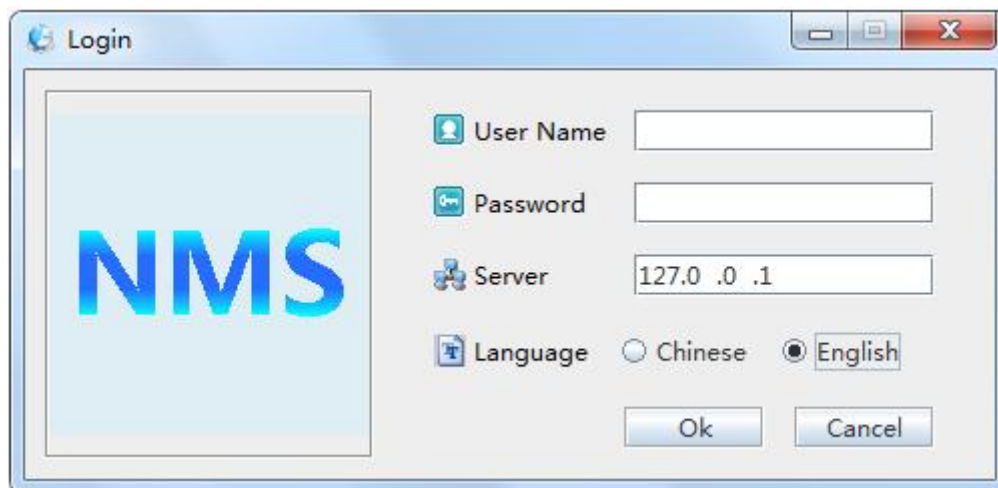
Step1: Select Language

Step2: Double click "Run RayClient" icon;

Step3: Type User name and password in the login dialog box;

Step4: click 'OK' to enter

User name: 0001 Password: 0001



Note

There is only one default administrator ID "0001" and the default password is "0001" after NetView installation, which should be modified to guarantee the system security. When using the system, the administrator should create new user and assign them into the corresponding restriction group.

Chapter 3 Basic Operation

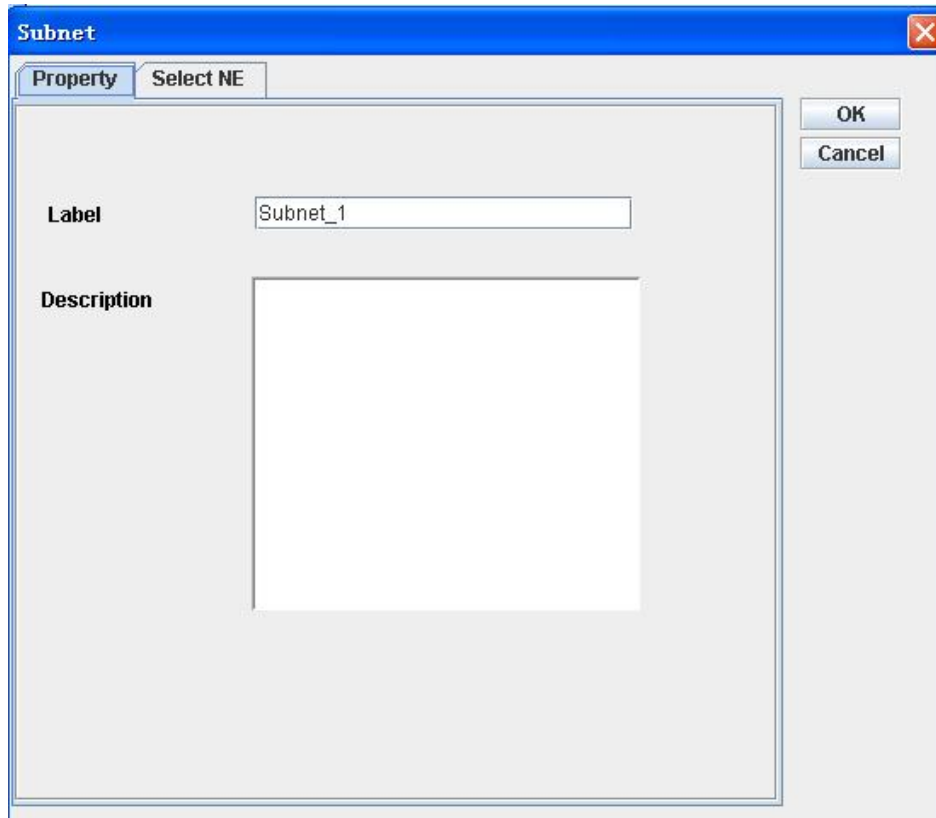
3.1 Create subnet

Steps

Click root node in the left side navigation bar, and then right-click to select [new subnet] in the right interface, the "new subnet" dialog box is shown:

Step1: input subnet label and description;

Step2: click <OK>



Note: subnet is just used as a container to carry NE, without any communication parameters.

3.2 Create NE

Steps

The screenshot shows the 'NE' configuration window. On the left, a tree view under 'NMS' shows 'MSAP III' expanded with several device types listed, including 'MOT804' which is highlighted. Below this is an 'Other' category with more device types. The main area on the right contains configuration fields: 'Type' is set to 'MOT804'; 'Name' is 'MOT804'; 'Gateway Type' is 'Gateway'; 'Net Type' is 'UpLink'; 'NE IP' is '192.168.0.155'; 'NE Address' is '0'; 'Trap IP(Default)' is '127.0.0.1'; and 'Description' is an empty text box. 'OK' and 'Cancel' buttons are at the bottom.

Step1: Click root node in the left side navigation bar or enter the subnet node which is already created, and then right-click to select [add NE device] in the right interface, the "NE" dialog box is shown:

Step2: Select the relevant NE device type from the list left side

Step3: input NE name, select gateway type, input IP and NE address;

Step4: Click<OK>

Note

The range of the NE address is from 00 to 98, which is set by the address switch on the front panel of BD-SDH63 equipment.

3.3 Delete subnet

Steps

1, right-click the subnet icon which is to be deleted, select "delete", pop up the "delete

subnet" dialog box.

2, click<OK> .

Note

Delete subnet operation do not delete the NE node, after subnet deleting, the contained NE node will be added under the root node automatically.

3.4 Delete NE

Steps

1, right-click the NE icon which is to be deleted, select "delete", pop up the "delete NE" dialog box.

2, click<OK> .

Note

Delete NE operation will delete all information about the NE, including the remote NE.

3.5 TCP/IP Communication

Purpose

Set NE IP, gateway IP and subnet mask.

Steps

1. in the navigation tree, select [config/system Manager/TCP/IP communication]

2, click <refresh>, refresh the communication parameters.

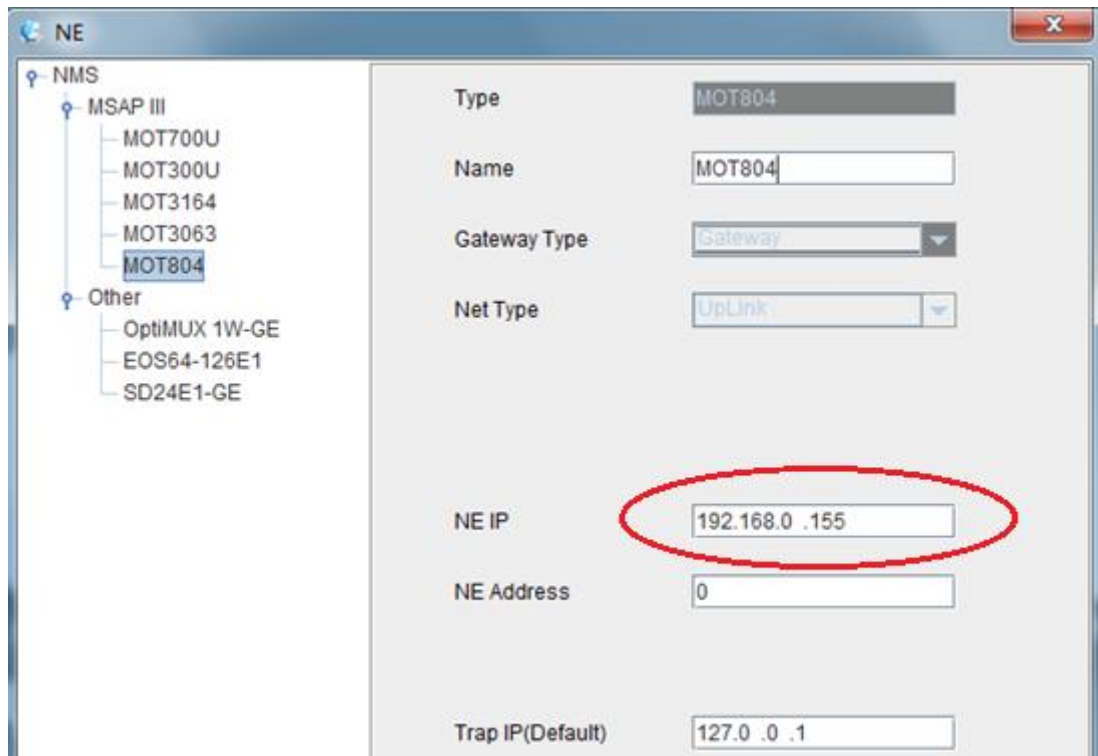
3, set NE IP, gateway IP and subnet mask.

Note

Name	Description
IP	NE IP address
Gateway	When managing the remote NE across network, TCP/IP communication can be implemented by router, the router IP is the gateway IP
IP mask	Subnet mask of the NE, which is used to determine subnet mask, whether the NE is on the local subnet or on

	a remote network.
Trap IP	The monitor sever IP address,

Note 1, if the NE IP address in "TCP/IP communication" is modified, the NE IP address in "NE " window should also be modified, the IP address in two location should be the same.



3.6 User group management

3.6.1 New user group and group restriction

Purpose

This operation is for the users who are capable of system maintenance right at least in the group restriction item

Steps

Step1: select [system-security-user group];

Step2: Right-click to select [new] in the pop up menu;

Step3: Type the new user group information in the popped up dialog box, click<OK>.

Note: step1~3 is used to create user group.

Step4: After creating user group, the system will pop up [group restriction] menu, select the restriction for the user group and click<OK>.

Note: step4 is used to assign restriction for each user group.

3.6.2 Edit restriction of user group

Purpose

This operation is for the users who are capable of system maintenance right at least in the management restriction item

Steps

Step1: select [system-security-user group];

Step2: right-click group list to select [group restriction];

Step3: the [group restriction] menu will be popped up, edit restriction of user group, click <OK>.

3.7 User management

3.7.1 New user and user restriction

Purpose

This operation is for the users who are capable of system maintenance right at least in the management restriction item

Steps

Step1: select [system-security-user];

Step2: Right-click to select [new] in the popup menu;

Step3: Type the new user information in the popped up dialog box, click<OK>.

Note: Step1~3 is used to create users.

Step4: After creating user, the system will pop up [user restriction] menu, select the restriction for the user and click<OK>.

Note: step4 is used to assign restriction for each user.

3.7.2 Edit user restriction

Purpose

This operation is for the users who are capable of system maintenance right at least in the management restriction item

Steps

Step1: select [system-security-user];

Step2: right-click group list to select [user restriction];

Step3: the [user restriction] menu will be popped up, edit restriction of user, click <OK>.

3.8 Log viewer

Purpose

The operation log records all kinds of operations (includes device operation and system operation);

Steps

In the main menu of network topology layer, select [system - log viewer], to view the operation records;

Right-click-<query>, pop up query interface, you may set the query condition to view the log records freely.

Note: Currently, the log cannot be deleted

System Operation Window Help

0

Total records: 1 Current page: 1 Records of each page: 200

Object	Name	Detail
client	Log on client	

Query

☒ All

Severity: All

Result: All

User:

Terminal:

Start Time: 0000-00-00 00:00:00

End Time: 0000-00-00 00:00:00

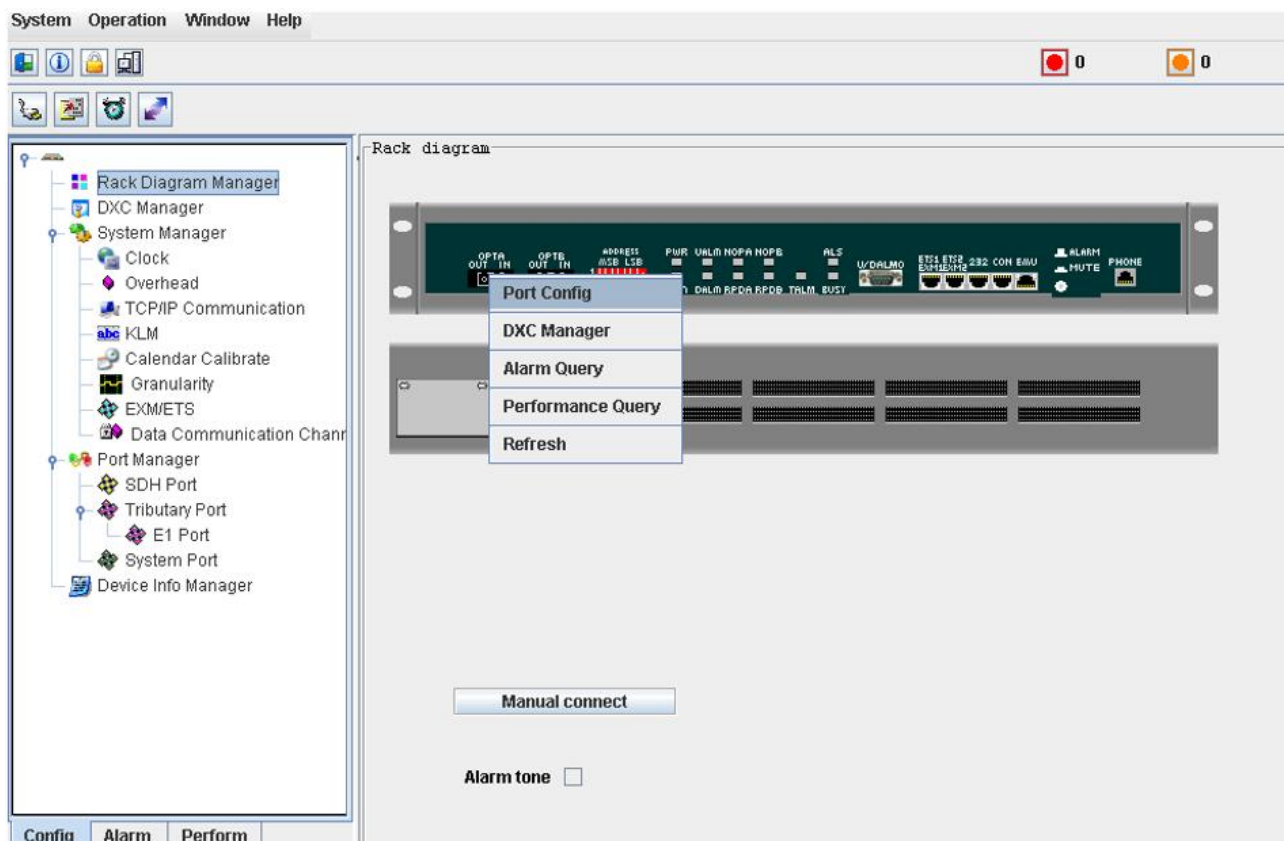
OK Close

Chapter 4 BD-SDH63 Functional Modules

4.1 Rack Diagram Manager

Steps

- 1 In the navigation tree, select [Rack Diagram Manager], the rack diagram is shown ;
- 2 Right-click the ports on the rack panel, the configuration window will pop up, this is the shortcut way for configuration;



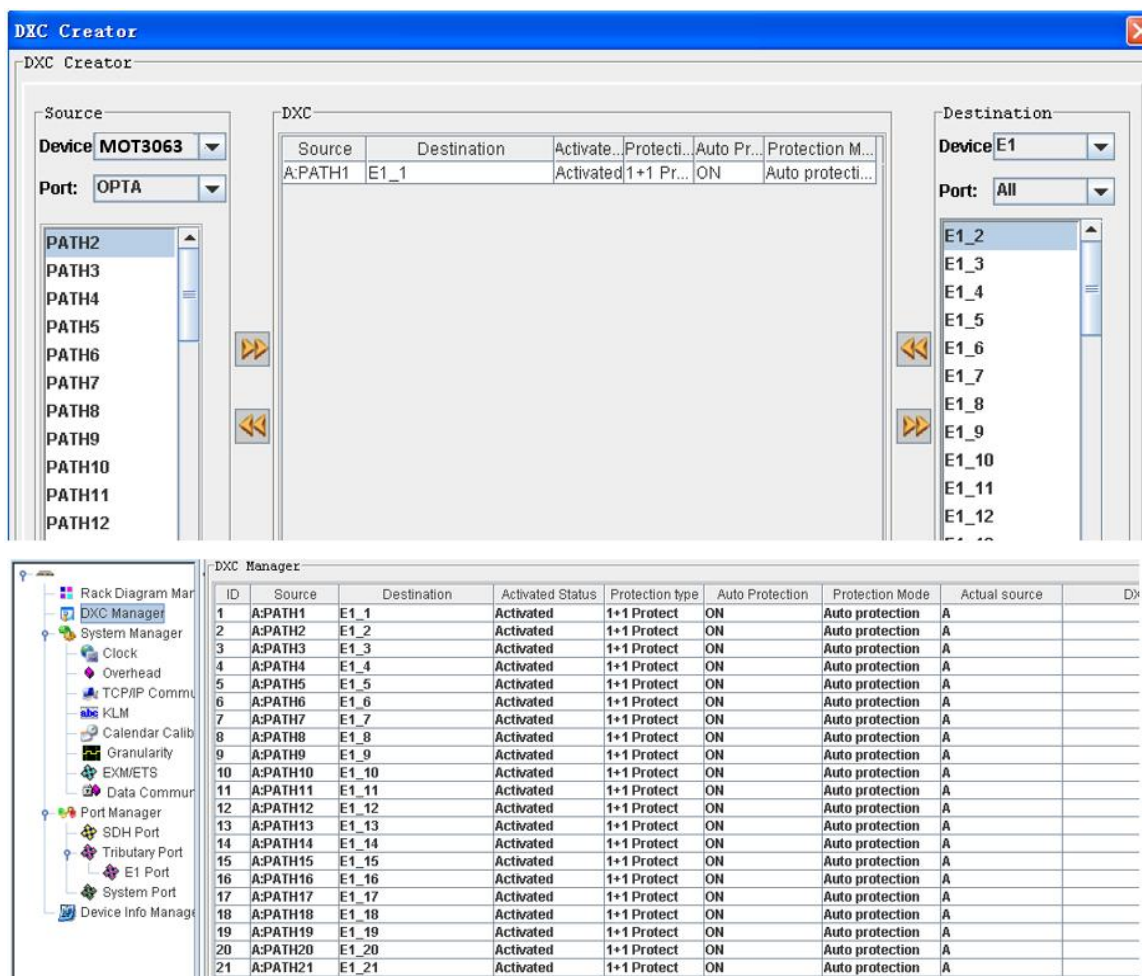
4.2 Create DXC

BD-SDH63 supports cross-connection, by which, the E1 traffic can be assigned to any timeslot of OPTA/B, the creation and deletion of cross-connection can be implemented by management software. The protection type can be 1+1, 1+0.

Steps

- 1 In the navigation tree, select [DXC manager- DXC] to enter DXC circuit;
- 2 Right-click the blank and select [create], the DXC creator window pop up;
- 3 In the "DXC creator" window, select BD-SDH63 and port from the source part, and E1 port from the destination part.

- 4 Select source path, such as PATH2, click Shift or Ctrl tab to select multiple continuous or intermittent paths. Click 
- 5 Click the created circuit, and then select the ;select the same number of destination E1 path. Click . Thus the cross-connection circuit is created.
- 6 To modify the DXC circuit, select one or more records, right-click to do the “open/close protection” or “activate/inactivate” operation.
- 7 To reconfigure the circuit, right-click to select “clear table” to clear all the records.
- 8 Click “OK” button, the DXC circuit status is “pre-adding”.
- 9, Click “config activate” button in the tool bar. The DXC circuit is “normal”.



Note

1. By default, there is no cross-connection, and all the timeslot resource is free.
- 2 The menu item description:

field	range	description
ID	e.g.:1, 2, 3, 4, 5	The number of the DXC circuit
Source	e.g.:A_ PATH1	The source of the circuit (including plate, slot, channel and timeslot)

Destination	e.g.E1_2	The destination of the circuit (including plate, slot, channel and timeslot)
Activated Status	Activate, inactivate	Indicate the circuit is available or not
Protection Type	1+1 mode 1+0 mode	1+1 mode:the client traffic is always transmitted in two directions, taking the same time slot, over the both working and protection path (VC12 or timeslot) simultaneously. 1+0 mode: the client traffic is transmitted over the dedicated working path without protection path standby. There is no protection path so the path of port A and port B with the same VC12 No. can be transmitted to different client traffic,
Auto Protection	ON OFF	(1) the DXC circuit for pass-through service do not supports protect function, it is "—" (2) when protection is 1+1 mode, it can be enabled or disabled; when protection is 1+0 mode, it is "—"
Protection Mode	Prefer switch to A Prefer switch to B Auto protection Force switch to A Force switch to B	For 'prefer switch to A/B' operation, the alarm (TU-AIS, TU-LOP) will be checked for the corresponding timeslot of optical A/B. If there is alarm, this operation will not be executed; while for 'force switch to A/B' operation, the system will switch to the pointed port without checking any alarm.
Actual source	e.g.:A	Show the actual source of circuit
DXC description	e.g.:XX bank	Show the user information

3 right-click menu

Menu Name	Function	Note
DXC Property	Pop up DXC Property window	
Create	Pop up create DXC manager window	
Delete	Delete that DXC circuit	
Open auto protect	Enable the 1+1 protection to that DXC circuit	
Close auto protect	Close the 1+1 protection to that DXC circuit	
Activate	Make that DXC circuit available for use	
Inactivate	Make that DXC circuit unavailable for use	
Query	Pop up DXC query window	
Refresh	Refresh DXC circuits	
Recover time	The preferred protection is supported when the auto-protection is enabled. There are several cases below: 1, when all the optical ports are normal, you can set the recover time from 1 to 10 minutes (Note : the default recover time is 3 minutes) to perform the preferred protection. E.g.: when both port A and B are normal, if the current work port is port A, and the preferred B operation is required, the recover time is set as 5 minutes, thus, after 5 minutes, the traffic will switch to port B. 2, when the preferred port is abnormal, the recover timer will start to work when that port is normal. E.g.: the current work port is port A, and the preferred B operation is required, the	

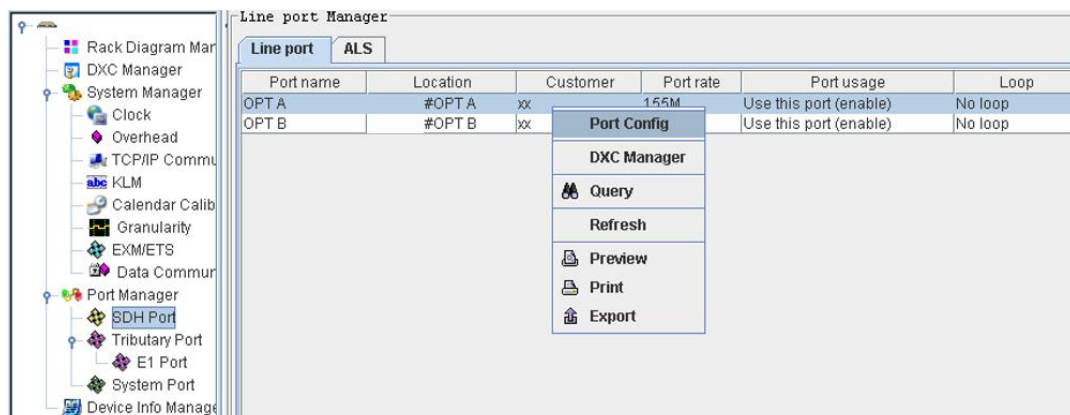
	recover time is set as 5 minutes, however port B is abnormal, thus, it will wait until port B is normal and the normal status is kept for 5 minutes, and then the traffic will switch to port B. 3, If both optical port A and B are abnormal, the recover time is set as 5 minutes, when the preferred B operation is required, the traffic will switch to port B immediately without waiting for 5 minutes; if port B is normal while port A is abnormal, it will switch to port B immediately without waiting for 5 minutes; 4, if preferred A operation is performed, and then preferred B operation is performed, thus preferred B operation is effective; and the recover timer will start to work when the first preferred command is performed. 5, the preferred switch operation can be saved before the device power off.	
--	---	--

4.3 Optical port

4.3.1 Enable /Disable port

Steps

1. In the navigation tree, select [config/port Manager/SDH port/line port].
2. Choose a record and right-click and select "Port Config".
3. click "General" tab, under port usage, select Enable/Disable



Port Config

General Threshold Loop Customer

Config
Refresh
Cancel

Wavelength 1310nm

Code pattern NRZ

Distance 40.0km

Temperature 47.781°C

Bias Current 2.36mA

Received Power -7.36dBm

Transmitted Power -2.07dBm

Port Usage

Enable
Enable
Disable

4.3.2 View Optical interface information

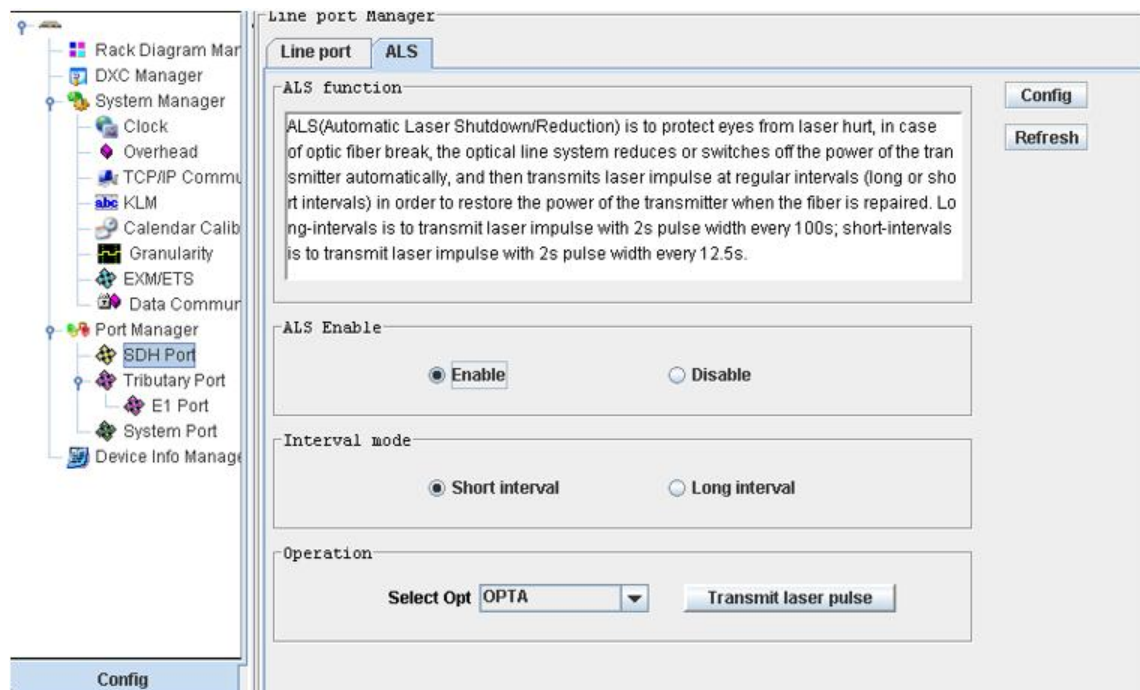
Steps

1. In the navigation tree, select [config/port Manager/SDH port/line port] .
2. Choose a record and right-click and select "Port Config".
3. click "General", "Threshold" tab, click "refresh" button to view the information.

4.3.3 ALS Configuration

Steps

1. In the navigation tree, select [config/port Manager/SDH port/ALS] .
2. do operations such as enable/ disable ALS, manual send pulse, long interval/short interval settings and so on,.



Note

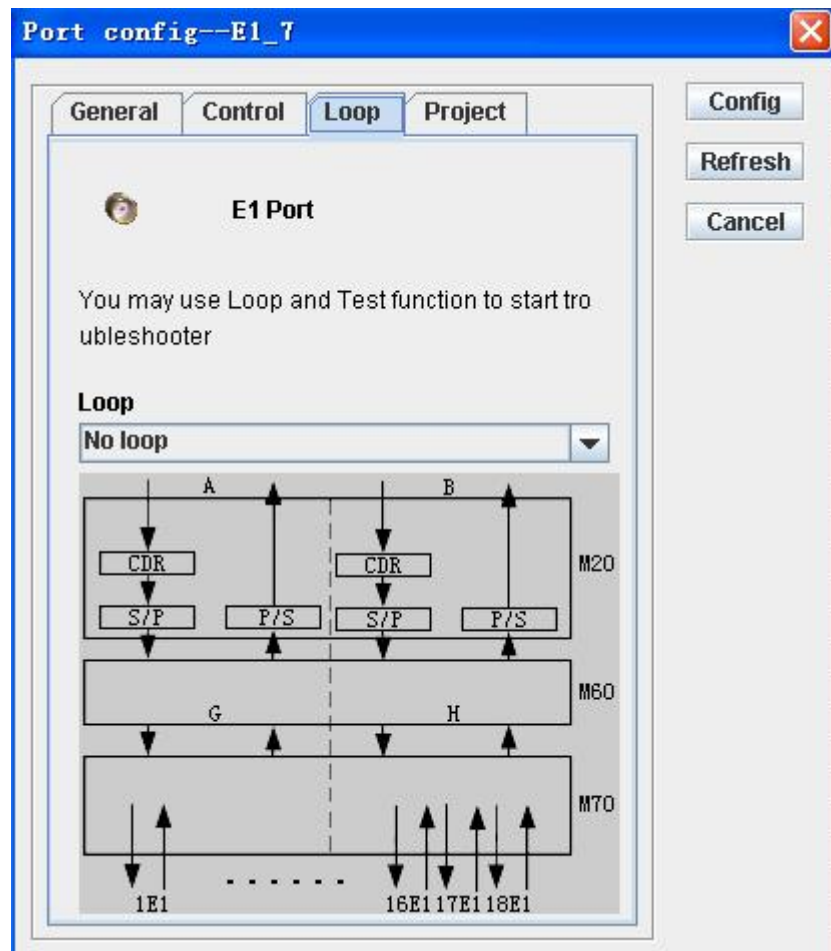
The ALS function of the OPTA, OPTB port must be configured as enabled or disabled simultaneously; only when the corresponding optical interface detects a Loss of signal and the ALS is enabled by SNMP, that particular optical interface will enter into the ALS state.

4.4 E1 port

4.4.1 E1 loop

Steps

1. In the navigation tree, select [config/port Manager/Tributary port/E1port].
2. Click "E1info" tab
3. Choose a record and right-click and select "Port Config".
3. Click "loop" tab, select line loop or device loop



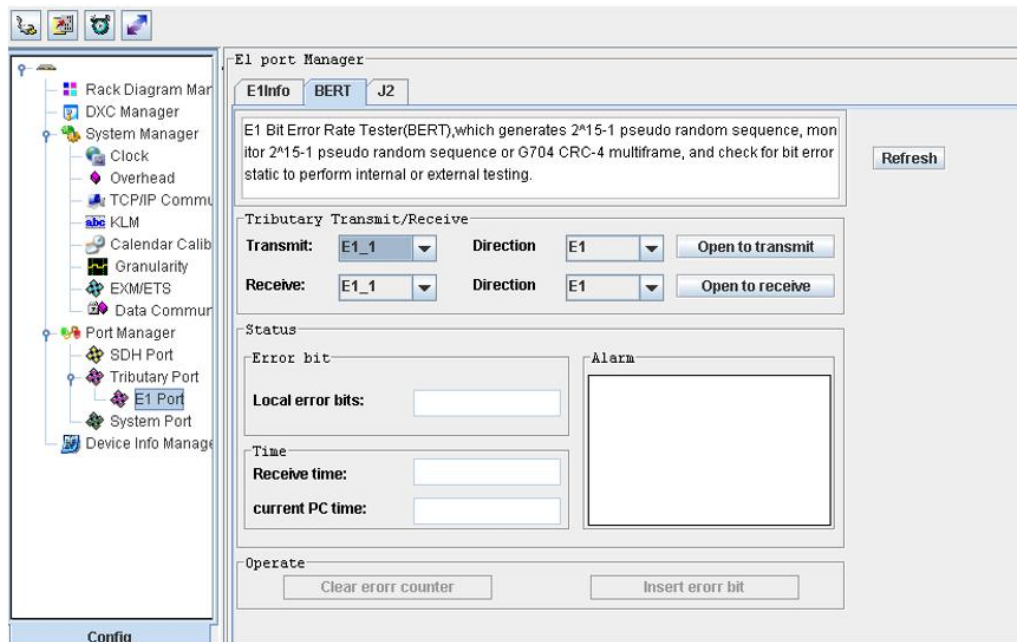
4.4.2 BERT testing

BD-SDH63 provides an embedded BERT (Bit Error Ratio Tester) for maintenance actions such as fault localization and failure detection. It makes a great facility for operator in environment without any external BERT.

The embedded BERT can detect any E1 line (it only detects the existed E1), note that the E1 used for BERT testing cannot be employed for traffic transmitting, but other E1 can work normally.

Steps

1. In the navigation tree, select [config/port Manager/Tributary port/E1port].
2. Click "BERT" tab



4.5 Configure Clock

Purpose

This part introduces how to configure SDH clock, including:

- ▲ Clock mode
- ▲ Clock PRI
- ▲ Frequency offset overrun switch
- ▲ Reference restoring time
- ▲ External timing source
- ▲ SSM
- ▲ current clock status

4.5.1 Clock mode Configuration

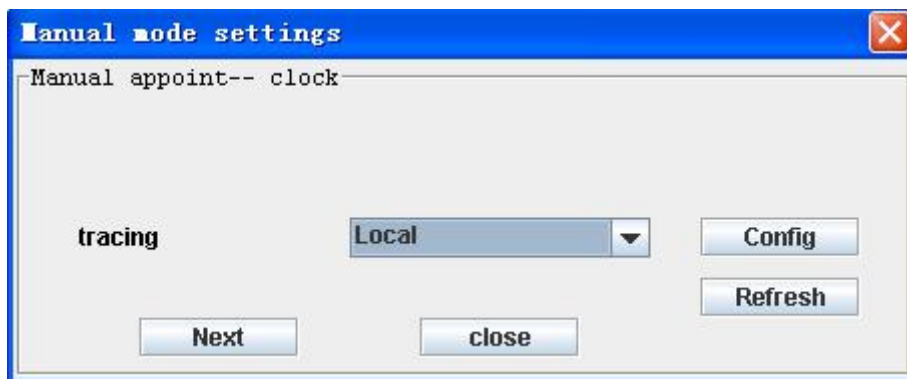
Steps

Steps1: in the navigation tree, select [config/system manager/clock], select in the “clock mode” item. Note : SSM and clock PRI is only available in the “auto mode”.

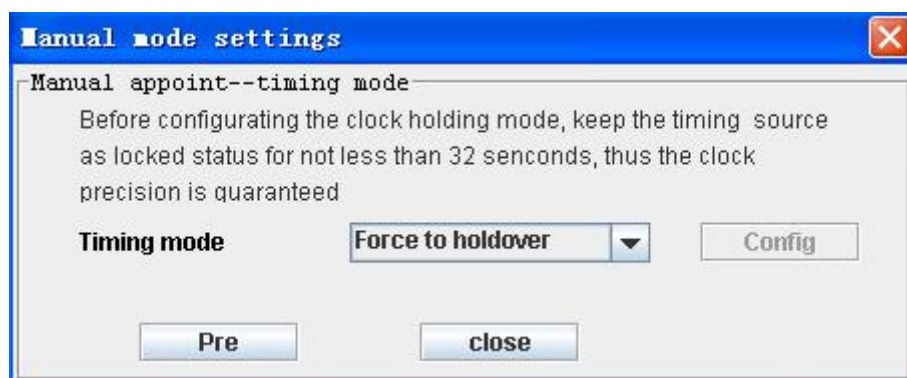
Clock mode ☐ Manual >> ☒ Auto		Reference restoring time Select time 1min ▼	
Auto			
SSM config ☐ Enable SSM ☒ Disable SSM			
Clock PRI			
Clock 1	Local ▼	Clock 2	OptA(T11) ▼
Clock 3	OptB(T12) ▼	Clock 4	None ▼
Clock 5	None ▼	Clock 6	None ▼

Step 2: click “manual” or click  button, pop up the manual mode settings window. First, set tracing clock as the following figure, when the settings is successful, it will send 3 commands:

- A, clock mode is manual
 - B, the clock reference assigned by manual
 - C, not force to holdover mode
- Click “next” button, to assign timing mode



Step3: in [timing mode] interface, only when the current timing source is identical with the timing source assigned manually, and it is locked status, the <force to holdover> can be configured.



4.5.2 Clock PRI Configuration

Purpose

This part introduce how to configure the priority of clock.

the equipment will always tracing the current available clock with the highest priority, only when the clock with the highest priority is deteriorate or manual swith clock, the equipment may switch to trace clock with lower priority.

For clock protection, two clock reference at least must be configured. Usually, tributary clock should not be used as the equipment clock.

Steps

Step1: in the navigation tree, select [config/system manager/clock], select in the “clock PRI” item. Select the timing reference according to the PRI

Step2: click <config>.

Step3: for the equipment which needs to be activated, click <config activate> button;

Clock PRI	
Clock 1	Local ▼
Clock 2	OptA(T11) ▼
Clock 3	OptB(T12) ▼
Clock 4	None ▼
Clock 5	None ▼
Clock 6	None ▼

4.5.3 Frequency offset overrun switch

Purpose

This part introduce how to set the frequency offset overrun switch.

when the frequency offset is out of normal range, the system will determine whether switch to the next clock according to this settings.

Steps

Step1: in the navigation tree, select [config/system manager/clock], select “switch when overrun” or “not switch when overrun”.

Step2: Click <config>.

Frequency offset overrun switch
☒ Switch when overrun ☐ Not switch when overrun

4.5.4 Reference restoring time

Purpose

This part introduces how to configure reference restoring time.

The equipment will wait for a period of time- the restoring time, when the timing source is from failure to available. If the timing source is always available in this period of time, the equipment will automatically set this timing as the available timing source. E.g. the degraded clock with highest PRI can be reused as the equipment timing source after being resorted.

Steps

Step1: in the navigation tree, select [config/system manager/clock], set the reference restoring time from “select time” dropdown box .

Step2: Click <config>.

Reference restoring time
Select time 1min ▼

4.5.5 ETS(external timing source) config

Purpose

The device can trace the ETS which can be 2.048Mb/s(HDB3) or 2.048MHz

Steps

Step1: in the navigation tree, select [config/system manager/clock], select 2.048Mb/s or 2.048MHz for input and output.

Step2: Click <config>.

4.5.6 SSM config

Purpose

SSM (Synchronization Status Message) is used for indicating quality level (QL) of clock reference timing, which make the SDH node acquire the upstream clock information by SSM, and transfer the information to the downstream. It adopts 4 bits code to indicate 16 types of message.

SSM channel :SSM can be transmitted through S1 byte of the multiplex section overhead as defined in ITU-T G.707. bit 5, 6, 7, 8 of S1 byte indicate 16 codes to represent quality level. The SSM generator can be closed and 1111 can be inserted, which means it can not be used for synchronization.

Steps

Step1: in the navigation tree, select [config/system manager/clock], configure SSM

Step2: Click <config>.

4.5.7 View the current clock status

Purpose

This part will introduce how to view the current clock status.

Steps

Step1: in the navigation tree, select [config/system manager/clock],

Step2: Click <refresh>.

Step3: view the current clock status.

Field	Range	Description
Current clock status	Locked, tracing, holdover, freerun mode	Show the current clock mode Locked mode: the clock of SDH will trace the same or higher quality input clock source, and locked the timing source. Holdover mode: if all the timing source supply fail, the clock signal is kept relatively accurate by controlling the oscillator and applying the stored frequency correction values for the previous signal. Free run mode: if the oscillator don't store the previous signal or is on the hold-over mode over 24 hours, the device will work on the free run mode..
Reference source	Such as: OPTA	Show the current reference source being traced. Normally, the clock of SDH will trace the highest quality clock source.
SSM information	Quality unknown, Rec. G.811, Rec.G.812 transit, Rec.G.812 local, Synchronous Equipment Timing Source(the internal oscillator of the equipment), Do not use for synchronization	Show the SSM information
S1 byte	Such as: no information	Show the S1 byte information
SSM value	00, 02, 04, 08, 0b, 0f	
Frequency offset		

4.6 Calendar calibrate

Purpose

The occurrence time of alarm and performance event is important for the maintenance, but the system time of NE and the management software may be different, so it is necessary to keep the time of NE in steps with that of the software.

Note:

- 1, please ensure the clock synchronization of the NEs in the network before configuring the time calibrate;
- 2, please ensure the server and client PC time is correct.
- 3, currently the calibrate only supports 24 hour clock.

Steps

Manually calibrate

- 1, in the navigation tree, select [config/system manager/calendar calibrate-manually.
- 2, input the NE time
- 3, click<OK>.

Automatically calibrate

- 1, in the navigation tree, select [config/system/calendar calibrate-automatically.
- 2, select "ON".
- 3, select the automatic calibrate cycle (based on the server time)
- 4, Click<config>.

4.7 KLM

Purpose

In order to be able to communicate with the equipment from other vendors, the management system provides three different concatenation types simultaneously: logic order, path order and line order.

Steps

Step1: in the navigation tree, select [config/system manager/ KLM].

Step2:Select optical interface:

- 1, view the TU-12 numbering: click <refresh> to view the TU-12 numbering.
- 2, set the TU-12 numbering: select the corresponding mode;
- 3, Click <config>.

TU12 numbering

When communicating with SDH device from other manufacturers, the appropriate numbering order should be selected.

Note

The logic order is default.

E.g.: Path 23 in logic order column corresponds to TU-12(2, 2, 1), where K=2, L=2, M=1.

Mode select

☐ Logic order

☒ Path order

☐ Line order

List

K	L	M	Logic Order	Path Order	Line Order
TUG3	TUG2	TU12			
1	1	1	1	1	1
2	1	1	22	2	22
3	1	1	43	3	43
1	2	1	2	4	4
2	2	1	23	5	25
3	2	1	44	6	46
1	3	1	3	7	7
2	3	1	24	8	28
3	3	1	45	9	49
1	4	1	4	10	10
2	4	1	25	11	31
3	4	1	46	12	52
1	5	1	5	13	13
2	5	1	26	14	34
3	5	1	47	15	55
1	6	1	6	16	16
2	6	1	27	17	37
3	6	1	48	18	58
1	7	1	7	19	19
2	7	1	28	20	40
3	7	1	49	21	61
1	1	2	8	22	2
2	1	2	29	23	23
3	1	2	50	24	44
1	2	2	9	25	5
2	2	2	30	26	26

Config

Save

Default

Refresh

4.8 Data communication channel

Purpose

In order to communicate with the equipment from other vendors, you need to configure the data communication channel.

Steps

Step1: in the navigation tree, select [config/system manager/data communication channel].

Step2: Select optical interface:

- 1, view the data communication channel: click <refresh> to view the data communication channel..
2. Set the data communication channel.: select the “mode”, “allow DCC”, “the other OHs source”;
- 3, Click <config>.

field	range
mode	select 'non-standard' mode to avoid overhead collision when communicating with device of other vendor
allow DCC	Control whether the network management software can manage this optical interface or not

the other OHs source	Set other OH source to pass-through or loopback the current free overhead when communicating with device of other vendor
----------------------	--

Note

1, in standard mode: EOW occupy E1, RS232 channel occupy F1, DCC channel occupy D1, D2, D3;

Other overhead: D4 V1 V2 D5 V3 V4 D6 V5 V6 D7 V7 V8 D8 V9 V10 D9 V11 V12 D10 D11 D12

2, in non-standard mode: EOW occupy D4, RS232 channel occupy D5, DCC channel occupy D6, D7, D8.

Other overhead: E1 F1 D1 D2 D3 V1 V2 V3 V4 V5 V6 V7 V8 V9 V10 D9 V11 V12 D10 D11 D12

4.9 EXM/ETS

Purpose

For BD-SDH63 equipment, the 23rd, 24th E1 in this interface can be used as ETS or XE1. T3/T4 port: external timing source interface, the equipment can extract the timing information from the T3 port and then recovery the system clock;

XE1 port: extended management interface, as external interface, an external management cable is needed to implement management; as internal interface, the management information is mapped to VC-12 channel, thus various network management information from different networks can be transmitted to the same management center. Note that the DXC configuration is needed when inner extendable management interface is used.

Steps

Step1: in the navigation tree, select [config/system manager/EXM/ETS].

Step2: select ETS1/2 or EXM, click <config>.

Step3: if select the IEXM, you need to configure the DXC circuit, refer to "DXC manager".

Data communication channel

ETS interface: by which the system clock is extracted and restored; EXM interface: Extended management interface, optional internal/external interface, as external interface, an external management ethernet cable is needed to implement network management; As internal interface, the network management data is mapped to VC12 channel, thus various network management information from different networks can be transmitted to the same management center. Note that the DXC configuration is needed when inner extendable management interface is used.

ETS1/EXM1

☐ T31/T41(ETS1)

☒ EXM

☐ OEXM

☒ IEXM

ETS2/EXM2

☐ T32/T42(ETS2)

☒ EXM

☐ OEXM

☒ IEXM

Embedded DCN configuration

ID	Source	Destination	Activated Status	Protection type	Auto P

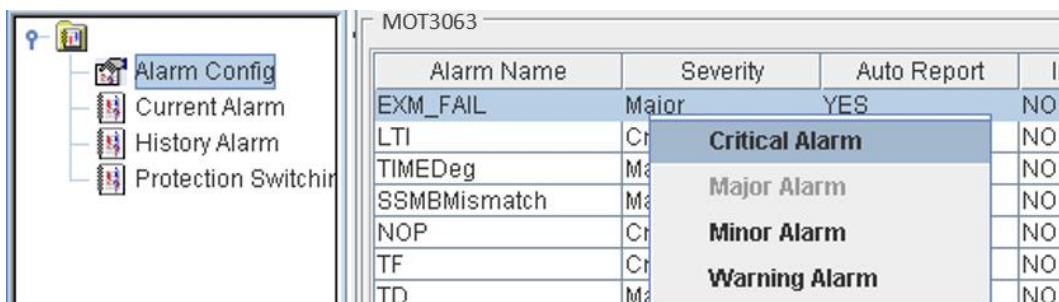
Chapter 5 Alarm and Performance

5.1 Alarm Management

5.1.1 Alarm Severity

Steps

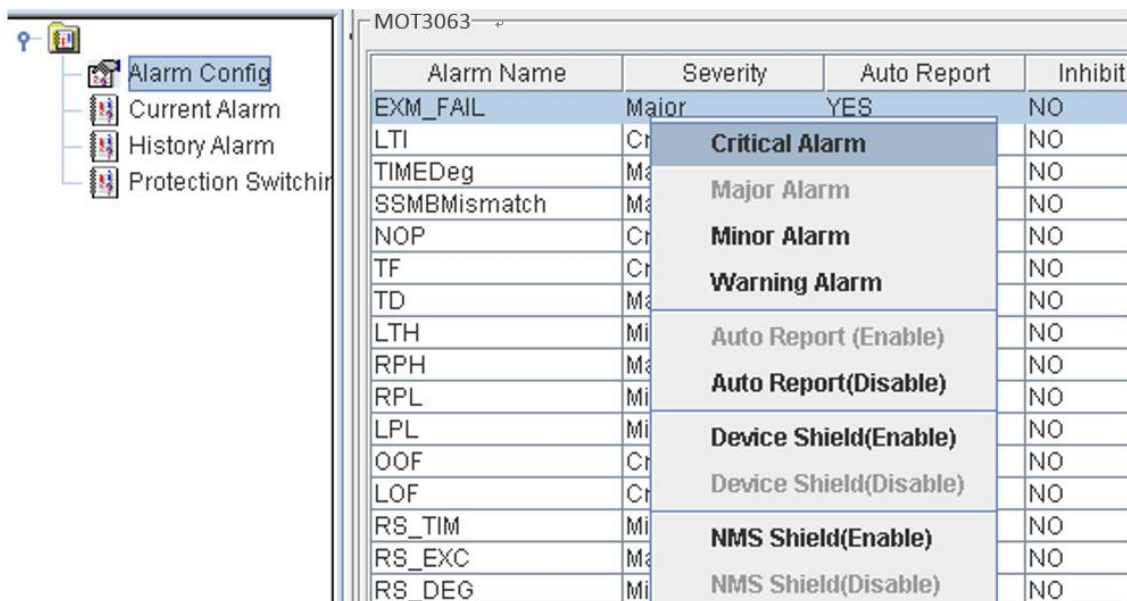
1. In the NE manager, click "alarm" tab at the left corner, In the navigation tree, click [alarm config]
2. Choose a record and right-click and select "critical alarm/major alarm/minor alarm/warning alarm".



5.1.2 Alarm shield

Steps

1. In the NE manager, click "alarm" tab at the left corner, In the navigation tree, click [alarm config]
2. Choose a record and right-click and select alarm shield configuration items.



Note

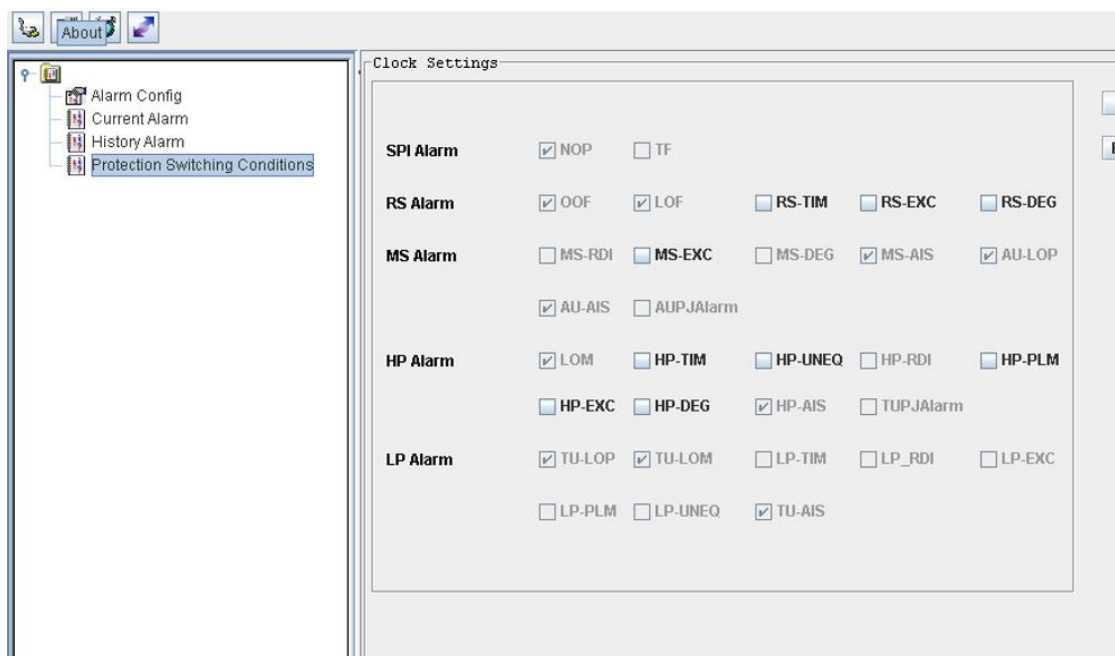
configuration item	description
Severity	Alarm level: Critical (red), major(orange), minor(yellow), warning(purple)
Auto report	Auto update is on: NE trap the alarm generated automatically (that is NE

	send the alarm to PC automatically when the alarm is occurred); Auto update is off: NE do not trap the alarm generated automatically, refresh alarm manually can update the alarm shown in PC (if alarm is not disappeared)
Device shield	If device shield is on, NE do not trap the alarm, and refresh alarm manually can not update the alarm shown in PC when alarm is occurred in device
NMS shield	NMS shield is on: NMS will discard the alarm when receiving; NMS inhibit alarm is off: the alarm will be saved into the database when received by NMS

5.1.3 Protection

Steps

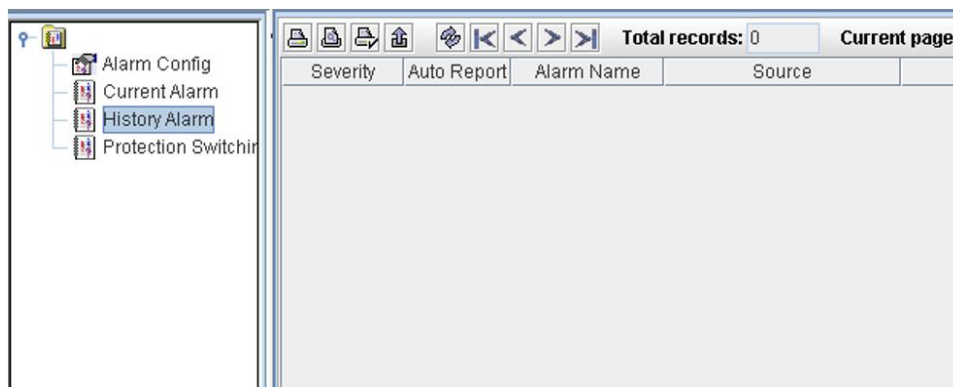
1. In the NE manager, click "alarm" tab at the left corner, In the navigation tree, click [alarm config-Protection switching conditions]
- 2 select the alarm as the condition of protection switching



5.1.4 Alarm View

Steps

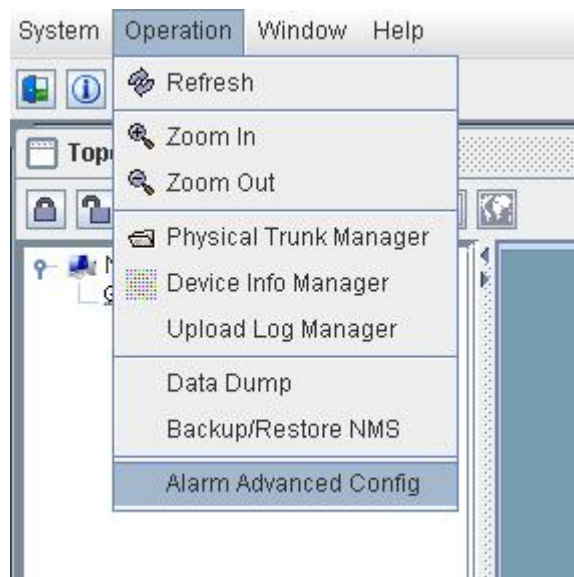
1. In the NE manager, click "alarm" tab at the left corner, In the navigation tree, click [alarm config-current alarm/history alarm]



5.1.5 Alarm Advanced Config

Steps

1. Click "Operation---Alarm Advanced Config"



The screenshot shows a software interface with a menu bar (System, Operation, Window, Help) and a toolbar with icons for file operations, help, and status. Below the toolbar, there are three main configuration sections:

- Alarm Auto Confirm:**
 - Time Confirm:
 - Confirm Cycle(days): (1-30)
- Alarm Auto Delete:**
 - Time Delete:
 - Delete Cycle(days): (1-30)
- Confirm Frequency:**
 - Frequent Alarm Monitor:
 - Confirm Time (M):
 - Confirm Frequency:

2. if you want to configure “Alarm Auto Confirm “, select Enable and set the cycle, as the following figure shows

This screenshot shows the 'Alarm Auto Confirm' section of the configuration window. It contains two settings:

- Time Confirm:
- Confirm Cycle(days): (1-30)

3. If you want to let the system delete the alarm automatically, select Enable and set the cycle, as the following figure shows

This screenshot shows the 'Alarm Auto Delete' section of the configuration window. It contains two settings:

- Time Delete:
- Delete Cycle(days): (1-30)

4. frequent alarm means the alarm is reported too often, sometimes, we do not want some alarm reported too often, you can select "Enable" to open the "Frequent Alarm Monitor", we can set the confirm time and the frequency. As following figure shows.

Confirm Frequency

Frequent Alarm Monitor:

Confirm Time (M):

Confirm Frequency:

5.2 Performance Management

Steps

1. In the NE manager, click "perform" tab at the left corner, In the navigation
2. do performance threshold configuration, performance view or performance clear

RS1020RS performance

Near-end error (15-minute threshold) Near-end error (24-hour threshold)

EB	0	EB	0
ES	0	ES	0
SES	0	SES	0
UAS	0	UAS	0

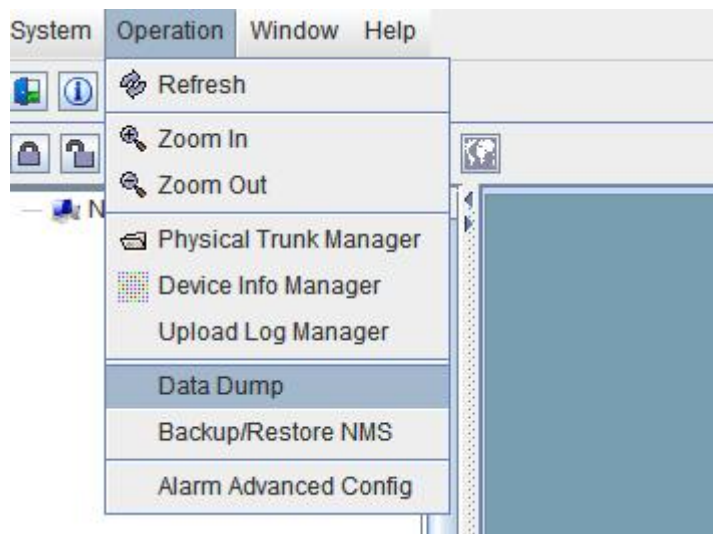
Performance View

Source	Type	Statistic time	EB
#Drop1	Current	2000-05-27 03:47:50	0
#Drop2	Current	2000-05-27 03:47:50	0
#Drop1	History	2000-05-27 03:45:00	0
#Drop2	History	2000-05-26 23:30:00	0
#Drop1	History	2000-05-27 03:30:00	0
#Drop2	History	2000-05-25 04:15:00	0
#Drop1	History	2000-05-27 03:15:00	0
#Drop2	History	2000-05-25 04:00:00	2
#Drop1	History	2000-05-27 03:00:00	0
#Drop2	History	2000-02-04 06:15:00	0
#Drop1	History	2000-05-27 02:45:00	0

5.3 Data Dump

Steps

1. Click "Operation---Data Dump"



2. If you want to let the data dump automatically, you should set some related parameters.

In the following picture, click " Dump Automatically",choose Alarm Record or Performance Record or Log Record that you want to dump, configure the related parameters.

If you type 5000 in "The largest Storage Capacity" , it means it can store up to 5000 records.

"Overflow Dump: Enable means when the storage is full (the record reach to the set number, e.g. 5000 in the picture), the system will automatically dump.

"Records Quantity": if you type 4000 in "Records Quantity", when the storage is full (the record reach to the set number), the 4000 records will be dump automaitically.

"Time Dump": enable means the system will periodic dump

"Dump Cycle": you can type the expect days as the cycle

"The Previous Days": if you type 3, the system will dump the data of 3 days ago.

System Operation Window Help

Dump Automatically Dump Manually

Alarm Record
Performance Record
Log Record

Dump Overflow

Overflow Dump
 The Largest Storage Capacity (1-20000)
 Records Quantity

Dump Cycle

Time Dump
 Dump Cycle (days) (1-1000)
 The Previous Days (1-1000)

Dump Location

Server zz-zhangqs
 Dump Path /NMS/server/bin/AlarmData/

3. If you want to do the data dump manually, click “Dump Manually”, choose the time and type quantity.

System Operation Window Help

Dump Automatically Dump Manually

Alarm Record
Performance Record
Log Record

Manually Dump Conditions

Ending Time

Records

Quantity

System
Operation
Window
Help






Dump Automatically
Dump Manually

Alarm Record
Performance Record
Log Record

Manually Dump Conditions

Ending Time

2018-03-01

Records

Quantity

Date

2018y

3m

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Dump