AX2500S Software Manual

Message and Log Reference

For Version 3.5

AX25S-S005X-70

Alaxala

Relevant products

This manual applies to the models in the AX2500S series of switches. It also describes the functionality of version 3.5 of the software for the AX2500S series of switches. The described functionality is that supported by the OS-L2B-A/OS-L2B and the advanced software upgrade license (the "License").

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Reading and storing this manual

Before you use the equipment, carefully read the manual and make sure that you understand all safety precautions. After reading the manual, keep it in a convenient place for easy reference.

Notes

Information in this document is subject to change without notice.

Editions history

January 2013 (Edition 8) AX25S-S005X-70

Copyright

History of Amendments

Ver. 3.5 (Edition 8)

Summary of amendments

Location and title	Changes
2.3.2 Event location = GSRP	● Descriptions related to peer links were added.
2.3.3 Event location = VLAN	● Logs related to peer links were added.
2.4.11 Event location = SML	● Logs related to peer links were added.
2.5.1 Event location = PORT	● The AX2530S-24TD, AX2530S-48TD, and AX2530S-24S4XD models were added.

In addition to the above changes, minor editorial corrections were made.

Ver. 3.4 (Edition 7)

Summary of amendments

Location and title	Changes
Event location = SESSION	● Logs related to login authentication were deleted.

In addition to the above changes, minor editorial corrections were made.

Ver. 3.3 (Edition 6)

Summary of amendments

Location and title	Changes
Event location = CONSOLE	● Descriptions related to IPv6 information were added.
Event location = TELNETC	● Descriptions related to IPv6 information were added.
Event location = STP	● Logs related to virtual link were added.
Event location = VLAN	● Logs related to virtual link were added.
Event location = VLAN (Ring Protocol)	● Logs related to master node, shared node, and multi fault detection functionalities were added.
Event location = IP	● Logs related to excessive entries in ARP table and NDP table, and duplication of IPv6 address were added.

In addition to the above changes, minor editorial corrections were made.

Ver. 3.2 (Edition 5)

Summary of amendments

Location and title	Changes
Event location = CONSOLE	● Logs related to the destruction of configuration were added.
Event location = VLAN	● Logs related to Tag conversion were added.
Event location = KERNEL	● Logs related to stopping the recovery process when the system failure occurred were added.
Event location = FABRIC	● Logs related to recovery process in the device driver were added.

In addition to the above changes, minor editorial corrections were made.

Ver. 3.2 (Edition 4)

Summary of amendments

Location and title	Changes
Code information for logs	● Descriptions related to event levels were changed.
Event location = PORT	● The AX2530S-24T4X and AX2530S-48T2X models were added.

In addition to the above changes, minor editorial corrections were made.

Ver. 3.1 (Edition 3)

Summary of amendments

Location and title	Changes
Event location = SNMP	● This subsection was added.
Event location = KERNEL	● Logs related to startup mode have been added.
Event location = PORT	● Logs related to unidirectional link failure detection were added. ● Logs related to SFP modules were added. ● Logs related to switching PHY operating mode were deleted.
Event location = SFP	● Logs related to SFP-T were added.
Event location = THERMO	● Logs related to corresponding long life solution were added.

In addition to the above changes, minor editorial corrections were made.

Ver. 3.1 (Edition 2)

Summary of amendments

Location and title	Changes
Event location = PORT	● Logs related to switching PHY operating mode were deleted.
Event location = SFP	● Descriptions related to SFP+ were added. ● Logs related to recovering port failure were added.
Event location = THERMO	● Logs related to corresponding long life solution were added.

In addition to the above changes, minor editorial corrections were made.

Preface

Applicable products and software versions

This manual applies to the models in the AX2500S series of switches. It also describes the functionality of version 3.5 of the software for the AX2500S series of switches. The described functionality is that supported by the OS-L2B-A/OS-L2B and the advanced software upgrade license (the "License").

Before you operate the equipment, carefully read the manual and make sure that you understand all instructions and cautionary notes. After reading the manual, keep it in a convenient place for easy reference.

Unless otherwise noted, this manual describes the functionality applicable commonly to AX2500S series switches. The functionalities specific to each model are indicated as follows:

[24T]:

The description applies to the AX2530S-24T switch.

[24T4X]:

The description applies to the AX2530S-24T4X switch.

[48T]:

The description applies to the AX2530S-48T switch.

[48T2X]:

The description applies to the AX2530S-48T2X switch.

[24S4X]:

The description applies to the AX2530S-24S4X switch.

[24TD]:

The description applies to the AX2530S-24TD switch.

[48TD]:

The description applies to the AX2530S-48TD switch.

[24S4XD]:

The description applies to the AX2530S-24S4XD switch.

[10G model]:

The description applies to AX2530S-24T4X, AX2530S-48T2X, AX2530S-24S4X, and AX2530S-24S4XD switches.

Unless otherwise noted, this manual describes the functionality for OS-L2B-A/OS-L2B. Functionality related to the Software License Agreement and License Sheet is indicated as follows:

[OS-L2A]:

The description indicates functionality supported by the Software License Agreement and License Sheet.

Corrections to the manual

Corrections to this manual might be contained in the *Release Notes* and *Manual Corrections* that come with the software.

Intended readers

This manual is intended for system administrators who wish to configure and operate a network system that uses the Switch.

Readers must have an understanding of the following:

- The basics of network system management

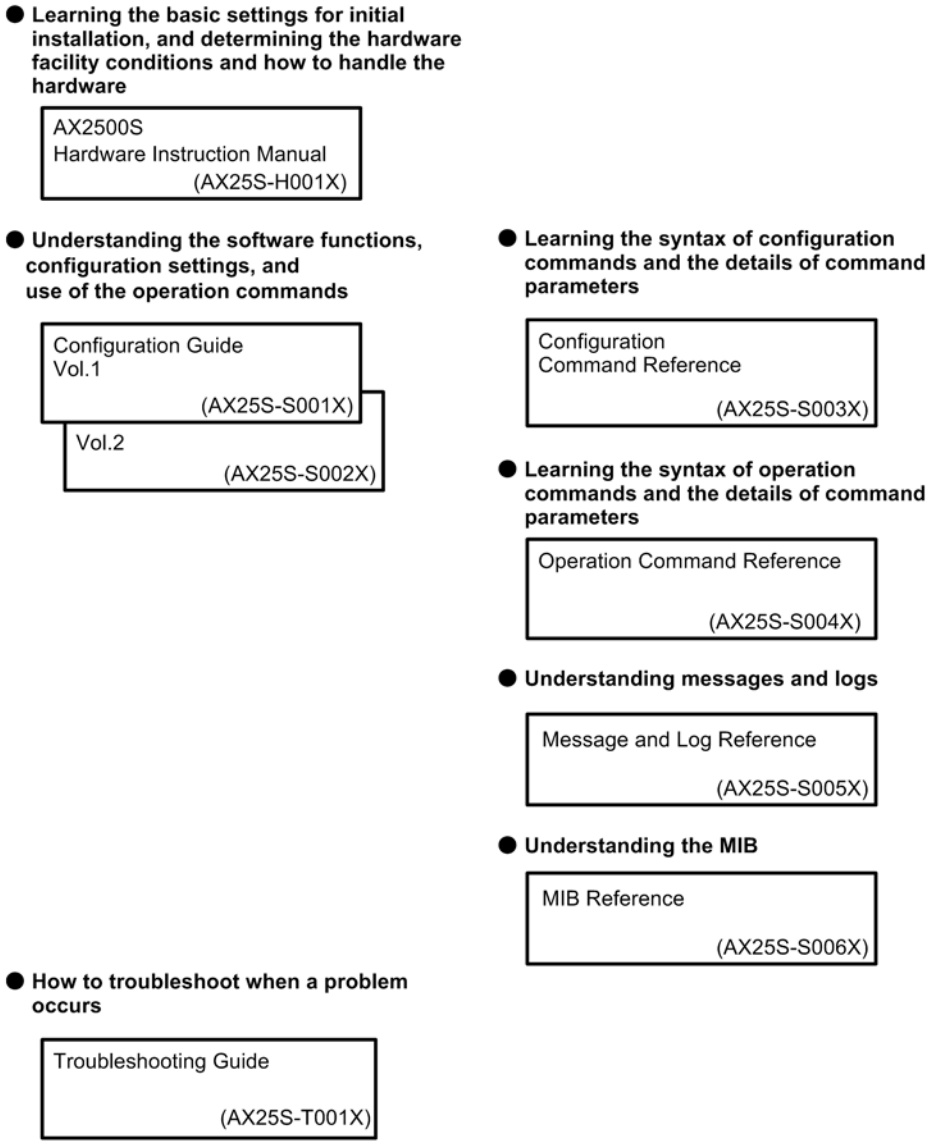
Manual URL

You can view this manual on our website at:

http://www.alaxala.com/en/

Reading sequence of the manuals

The following shows the manuals you need to consult according to your requirements determined from the following workflow for installing, setting up, and starting regular operation of the Switch.



Abbreviations used in the manual

AC	Alternating Current
ACK	ACKnowledge
ADSL	Asymmetric Digital Subscriber Line
ALG	Application Level Gateway

ANSI	American National Standards Institute
ARP	Address Resolution Protocol
AS	Autonomous System
AUX	Auxiliary
BGP	Border Gateway Protocol
BGP4	Border Gateway Protocol - version 4
BGP4+	Multiprotocol Extensions for Border Gateway Protocol - version 4
bit/s	bits per second (can also appear as bps)
BPDU	Bridge Protocol Data Unit
BRI	Basic Rate Interface
CC	Continuity Check
CDP	Cisco Discovery Protocol
CFM	Connectivity Fault Management
CIDR	Classless Inter-Domain Routing
CIR	Committed Information Rate
CIST	Common and Internal Spanning Tree
CLNP	ConnectionLess Network Protocol
CLNS	ConnectionLess Network System
CONS	Connection Oriented Network System
CRC	Cyclic Redundancy Check
CSMA/CD	Carrier Sense Multiple Access with Collision Detection
CSNP	Complete Sequence Numbers PDU
CST	Common Spanning Tree
DA	Destination Address
DC	Direct Current
DCE	Data Circuit terminating Equipment
DHCP	Dynamic Host Configuration Protocol
DIS	Draft International Standard/Designated Intermediate System
DNS	Domain Name System
DR	Designated Router
DSAP	Destination Service Access Point
DSCP	Differentiated Services Code Point
DTE	Data Terminal Equipment
DVMRP	Distance Vector Multicast Routing Protocol
E-Mail	Electronic Mail
EAP	Extensible Authentication Protocol
EAPOL	EAP Over LAN
EFM	Ethernet in the First Mile
ES	End System
FAN	Fan Unit

FCS	Frame Check Sequence
FDB	Filtering DataBase
FQDN	Fully Qualified Domain Name
FTTH	Fiber To The Home
GBIC	GigaBit Interface Converter
GSRP	Gigabit Switch Redundancy Protocol
HMAC	Keyed-Hashing for Message Authentication
IANA	Internet Assigned Numbers Authority
ICMP	Internet Control Message Protocol
ICMPv6	Internet Control Message Protocol version 6
ID	Identifier
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers, Inc.
IETF	the Internet Engineering Task Force
IGMP	Internet Group Management Protocol
IP	Internet Protocol
IPCP	IP Control Protocol
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
IPV6CP	IP Version 6 Control Protocol
IPX	Internetwork Packet Exchange
ISO	International Organization for Standardization
ISP	Internet Service Provider
IST	Internal Spanning Tree
L2LD	Layer 2 Loop Detection
LAN	Local Area Network
LCP	Link Control Protocol
LED	Light Emitting Diode
LLC	Logical Link Control
LLDP	Link Layer Discovery Protocol
LLQ+3WFQ	Low Latency Queueing + 3 Weighted Fair Queueing
LSP	Label Switched Path
LSP	Link State PDU
LSR	Label Switched Router
MA	Maintenance Association
MAC	Media Access Control
MC	Memory Card
MD5	Message Digest 5
MDI	Medium Dependent Interface
MDI-X	Medium Dependent Interface crossover

MEP	Maintenance association End Point
MIB	Management Information Base
MIP	Maintenance domain Intermediate Point
MRU	Maximum Receive Unit
MSTI	Multiple Spanning Tree Instance
MSTP	Multiple Spanning Tree Protocol
MTU	Maximum Transfer Unit
NAK	Not AcKnowledge
NAS	Network Access Server
NAT	Network Address Translation
NCP	Network Control Protocol
NDP	Neighbor Discovery Protocol
NET	Network Entity Title
NLA ID	Next-Level Aggregation Identifier
NPDU	Network Protocol Data Unit
NSAP	Network Service Access Point
NSSA	Not So Stubby Area
NTP	Network Time Protocol
OADP	Octpower Auto Discovery Protocol
OAM	Operations, Administration, and Maintenance
OSPF	Open Shortest Path First
OUI	Organizationally Unique Identifier
packet/s	packets per second (can also appear as pps)
PAD	PADding
PAE	Port Access Entity
PC	Personal Computer
PCI	Protocol Control Information
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PID	Protocol IDentifier
PIM	Protocol Independent Multicast
PIM-DM	Protocol Independent Multicast-Dense Mode
PIM-SM	Protocol Independent Multicast-Sparse Mode
PIM-SSM	Protocol Independent Multicast-Source Specific Multicast
PoE	Power over Ethernet
PRI	Primary Rate Interface
PS	Power Supply
PSNP	Partial Sequence Numbers PDU
QoS	Quality of Service
RA	Router Advertisement

RADIUS	Remote Authentication Dial In User Service
RDI	Remote Defect Indication
REJ	REJect
RFC	Request For Comments
RIP	Routing Information Protocol
RIPng	Routing Information Protocol next generation
RMON	Remote Network Monitoring MIB
RPF	Reverse Path Forwarding
RQ	ReQuest
RSTP	Rapid Spanning Tree Protocol
SA	Source Address
SD	Secure Digital
SDH	Synchronous Digital Hierarchy
SDU	Service Data Unit
SEL	NSAP SELector
SFD	Start Frame Delimiter
SFP	Small Form factor Pluggable
SFP+	Enhanced Small Form factor Pluggable
SML	Split Multi Link
SMTP	Simple Mail Transfer Protocol
SNAP	Sub-Network Access Protocol
SNMP	Simple Network Management Protocol
SNP	Sequence Numbers PDU
SNPA	Subnetwork Point of Attachment
SPF	Shortest Path First
SSAP	Source Service Access Point
STP	Spanning Tree Protocol
TA	Terminal Adapter
TACACS+	Terminal Access Controller Access Control System Plus
TCP/IP	Transmission Control Protocol/Internet Protocol
TLA ID	Top-Level Aggregation Identifier
TLV	Type, Length, and Value
TOS	Type Of Service
TPID	Tag Protocol Identifier
TTL	Time To Live
UDLD	Uni-Directional Link Detection
UDP	User Datagram Protocol
ULR	Uplink Redundant
UPC	Usage Parameter Control
UPC-RED	Usage Parameter Control - Random Early Detection

VAA	VLAN Access Agent
VLAN	Virtual LAN
VRRP	Virtual Router Redundancy Protocol
WAN	Wide Area Network
WDM	Wavelength Division Multiplexing
WFQ	Weighted Fair Queueing
WRED	Weighted Random Early Detection
WS	Work Station
WWW	World-Wide Web
XFP	10 gigabit small Form factor Pluggable

Conventions: The terms "Switch" and "switch"

The term Switch (upper-case "S") is an abbreviation for any or all of the following models:

- AX2500S series switch

The term switch (lower-case "s") might refer to a Switch, another type of switch from the current vendor, or a switch from another vendor. The context decides the meaning.

Conventions: KB, MB, GB, and TB

This manual uses the following conventions:

1 KB (kilobyte) is 1024 bytes.

1 MB (megabyte) is 1024^2 bytes.

1 GB (gigabyte) is 1024^3 bytes.

1 TB (terabyte) is 1024^4 bytes.

Contents

1. Operation Messages and Logs

This chapter explains how to use the failed part, operation messages, and logs, to identify the location of errors that have occurred.

1.1 Checking operation messages

The Switch outputs information to be reported to the administrator, such as activity status and failure information, to an operation terminal as operation messages. Operation messages are also stored internally as operation log data. Using this log data, you can manage the switch operating status.

1.1.1 Message types

The following table describes the types of output messages and gives references for those messages. Among these messages, failure and event information that is output by the switch is called an operation message.

Table 1-1 Message types and references

Message type	Description	Reference
Configuration error messages	Messages output for input of configuration command	*Error Messages on Configuration Editing* in the manual *Configuration Command Reference*
Command response messages	Messages output for command input	*Response Messages* section of each command in the manual *Operation Command Reference*
Operation messages	Device failure information and event information	*2. Device Failure and Event Information*

1.1.2 Contents of operation messages

The following table describes the support status of operation messages.

Table 1-2 Support status of operation messages

Category	Function item	Operation messages
Device failure and event information	Failure information for each event location	Y
	Event information per event location of the switch	Y

(Legend)

Y: Message is displayed

N: Message is not displayed

1.1.3 Format of operation messages

(1) Device failure and event information

The following shows the format of device failure and event information.

Figure 1-1 Format of switch failure and event information

```
mm/dd hh:mm:ss  ee  kkkkkkkk  [iii…iii]  xxxxxxxx    ttt-ttt
      1         2     3          4          5          6
```

1. Time: Displays the date and time (month, day, hour, minute, and second) that the event indicated in the message occurred.
2. Event level

3. Event location or functionality
4. Event interface ID. Whether this information is displayed depends on the event location.
5. Message ID
6. Message text

The code information included in the message, such as the event level, event location, or functionality, is the same as that in the log. For details, see *1.2.4 Format of the reference log*.

1.1.4 Outputting operation messages

(1) Device failure and event information

All messages for device failure and event information are output to the operation terminal screen. Depending on the error severity or event contents, the information is classified into seven event levels, ranging from E3 to E9. If you specify the event level by using the `set logging console` command, you can limit the output of messages to the specified level or lower.

1.2 Checking the log

1.2.1 Log types

The Switch acquires two types of logs: operation log and reference log. The operation log acquires entered commands, operation event information, and command response messages and operation information selected to be output as operation messages to the operation terminal. This information is acquired as log data in chronological order. The reference log acquires statistics for device failure and event information within the operation message.

The following table describes the features of the operation log and reference log.

Table 1-3 Features of the operation log and reference log

Item	Operation log	Reference log
Log contents	● Acquires events that occurred in chronological order.	● Records statistics for each event, such as the time of the first and last occurrences, and the total number of occurrences.
Maintenance information that is acquired	● Entered commands ● Command response messages ● Device failure and event information	● Device failure and event information
Number of acquired entries	● 1500 entries can be acquired. Within those, the first 1000 log entries are saved chronologically. ● The remaining 500 entries consist of older entries whose log type is ERR or EVT.	● 500 entries can be acquired. ● If the number of log entries exceeds 500, entries that have a lower event level are be deleted and new entries are acquired.
Overflow processing when the log size is exceeded	● If the number of log entries exceeds 1000, whether old entries are deleted or saved depends on the log type. ● Excess old entries whose log type is not ERR or EVT are deleted. ● Excess old entries whose log type is ERR or EVT are saved as entries 1001 to 1500. If the number of log entries exceeds 1500, old log entries are deleted.	● If the number of log entries exceeds 500, entries that have a lower event level are deleted and the new entries are acquired.

1.2.2 Log contents

The following table describes the information acquired in the operation log and reference log.

Table 1-4 Information acquired in the operation log and reference log

Category	Description	Operation log	Reference log	Reference
Entered commands	Commands entered from the operation terminal by operators	Y	N	--
Command response messages	Messages output by switches to respond to entered commands	Y	N	*Response Messages* section of each command in the manual *Operation Command Reference*
Device failure and event information	Failure information for each event location	Y	Y	*2. Device Failure and Event Information*
	Event information per event location of the switch	Y	Y	

(Legend)

Y: Messages are displayed or log data is acquired.

N: Messages are not displayed, and log data is not acquired.

--: Not applicable.

1.2.3 Format of operation logs

Messages that are in operation are saved within the device. When log data is stored, it is formatted with a log type for output as operation messages to the screen.

(1) Device failure and event information

The following shows the format of device failure and event information.

Figure 1-2 Format of switch failure and event information

```
kkk  mm/dd hh:mm:ss  ee  kkkkkkkk  [iii…iii]  xxxxxxxx
 1        2          3      4          5          6

ttt-ttt
    7
```

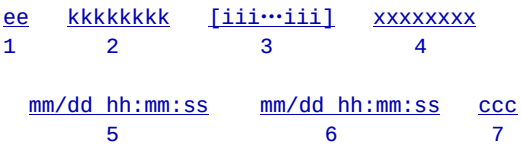
1. Log type: Displays a three-letter identification code assigned to each provided functionality.
   - ERR: Failure information for a switch event location
   - EVT: Event information for a switch event location
2. Time: Displays the month, day, hour, minute, and second when the event occurred.
3. Event level
4. Event location or functionality
5. Event interface ID. Whether this information is displayed depends on the event location.
6. Message ID
7. Message text

1.2.4 Format of the reference log

Error information and event information related to the switch are saved as operation logs in the order they occurred, and are also saved as reference logs. Reference logs categorizes the information by message ID, and then records the event time of the first and last occurrences, and total number of occurrences.

The following figure describes the format of the reference log.

Figure 1-3 Format of the reference log



1. Event level (E9 to E3)
2. Event location or functionality
3. Event interface ID. Whether this information is displayed depends on the event location.
4. Message ID
5. Occurrence date and time of the last applicable error
6. Occurrence date and time of the first applicable error
7. Number of occurrences of the applicable error

1.2.5 Code information for logs

(1) Log type

The following log types are given to the operation log entries:

- Command operation by the user and its result
- Operation information output by the switch
- Error information

The following table describes the correspondence between information acquired as logs and log types. Within the operation logs, event level is given to device failure and event information and reference logs.

Table 1-5 Correspondence between the information acquired as a log and log type

Information to be acquired	Log type	Description	Event level
Input command	KEY	Commands entered by an operator from an operation terminal	--
Command response messages	RSP	Messages output by a switch in response to commands	--
Device failure and event information	ERR	Failure information for a switch event location	E9 to E5
	EVT	Event information for a switch event location	E4, E3, R8 to R5

(Legend) --: Not applicable.

(2) Event level

Events in the reference log are classified into seven levels depending on their severity. The following table describes the event levels and their contents.

Table 1-6 Event levels and their contents

Event level	Display contents (type)	Description
9	E9 (fatal error)	This error stops the whole system. (The system might restart or operation might stop.)
8	E8 (critical error) R8 (recover from critical error)	This error stops a fan, the power, or part of the switch. ● If this error is due to a hardware error, restarting the applicable hardware is involved.
7	E7 (temperature failure) R7 (recover from temperature failure)	This error is information related to a temperature failure.
6	E6 R6	Not used
5	E5 R5	Not used
4	E4 (network error)	This error is information related to lines (LAN).
3	E3 (warning)	This error is a warning.

Note that when an error whose event level is from E9 to E5 is recovered, a relevant operation message whose event level is from R8 to R5 is output. Also, when an error from E9 to E5 occurs, the operation log and reference log are automatically saved to internal flash memory.

(3) Event location

The reference log uses an ID to indicate the location or the functionality of the event that occurred. The following table describes the event locations.

Table 1-7 Event locations

ID	Event location or functionality
CONSOLE	Console operation
SESSION	Login or logout operation for Telnet, console, or FTP
TELNETC	Login or logout operation by a Telnet client
STP	Spanning Tree functionality
GSRP	GSRP aware functionality
VLAN	VLAN control functionality

ID	Event location or functionality
VLAN (Ring Protocol)	Ring Protocol functionality
VLAN (CFM)	Connectivity Fault Management functionality
SNOOP	IGMP/MLD snooping functionality
DHCP	DHCP server functionality
LINKAGG	Link aggregation functionality
DHCPSN	DHCP snooping functionality
IP	IP control functionality
SNMP	SNMP functionality
KERNEL	Software controller
NTP	NTP client functionality
802.1X	IEEE 802.1X authentication functionality
RADIUS	RADIUS authentication functionality
CERTIF	MAC-based authentication functionality and Web authentication functionality
HTTPD	Web authentication functionality (Web server)
QOS	QoS or transmission control functionality
FIELD	Filtering functionality
SWOL	Secure Wake-on-LAN functionality
ECO	Power saving functionality
SML	SML (Split Multi Link)
PORT	Port control functionality
SFP	SFP module control functionality
FABRIC	Switching driver controller
ULR	Uplink redundancy functionality
ROM	ROM diagnosis
RTC	RTC functionality
THERMO	Temperature sensor functionality

ID	Event location or functionality
SDCARD	SD card control functionality
FAN	Fan controller
LED	LED functionality
SVP	Service processor monitoring functionality
PWRSUP	Power supply controller
PCI	PCI bus controller
RAM	RAM diagnosis
PS	PS control functionality

(4) Event interface ID

This ID indicates the location of the interface where the event occurred. The following table describes the display formats of the interface ID.

Table 1-8 Display format of the interface ID

Display format of the ID	Interface
`GigabitEthernet 0/1`	10/100/1000BASE-T or 1000BASE-X part
`TenGigabitEthernet 0/25`	10GBASE-R part

(Legend)

`1`: Port number

(5) Message identifier

This information contains a code that indicates the contents of the event that occurred. For details about this information, see *2. Device Failure and Event Information*.

(6) Time of the first and last occurrences of the applicable event

This information indicates the time of the first and last occurrences of the applicable event.

(7) Number of occurrences of the applicable event

This information indicates the total number of occurrences of the applicable event if repeated. The total is the number of event occurrences counting from the start of log acquisition to the present. If the applicable event occurs 255 times or more, the number of occurrences will be indicated as 255.

1.2.6 Automatically saving and viewing logs

(1) Saving logs automatically

The following describes the occasions when the operation logs and reference logs are automatically saved to internal flash memory and the destination to which they are saved.

Occasions when logs are automatically saved:

1. When a critical error with an event level from E9 to E5 occurs
2. When the device is restarted by using the `reload` command
3. When login or logout is performed
4. When the device is restarted accompanying `ppupdate`
5. When the device enters sleep mode

Table 1-9 Location of saved logs

Log type	Location of internal memory
Operation log	Logs are saved to the internal flash memory of the Switch
Reference log	Logs are saved to the internal flash memory of the Switch

(2) Viewing logs

Operation logs and reference logs can be referenced by using the `show logging` command.

(3) Acquiring logs from remote hosts

Logs can be acquired from remote hosts by using the `syslog` output functionality. However, the `syslog` output functionality might lose log information due to reasons such as frame loss.

For details about the `syslog` output functionality, see *Logging facility* in the manual *Configuration Command Reference*.

2. Device Failure and Event Information

This chapter describes the contents of device failure and event information. All messages for device failure and event information are output to the operation terminal screen. Depending on the error severity or the event contents, the information is classified into seven event levels, ranging from E3 to E9.

2.1 Configuration

2.1.1 Event location = CONSOLE

The following tables describe device failure and event information when the event location is `CONSOLE`.

- E3 information

Table 2-1 Device-related E3 information when the event location is CONSOLE

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	CONSOLE	01800000	`This system started with the default configuration file. because the startup configuration file is not found or broken.`
	A startup configuration file could not be read. Alternatively, the startup configuration file was empty. [Action] 1. The startup configuration file might have been deleted by the `erase startup-config` operation command. Reconfigure the startup configuration by using configuration commands, save the configuration into the startup configuration file, and then restart the switch. 2. The startup configuration file in the internal flash memory might be corrupted. After deleting the startup configuration file by using the `erase startup-config` operation command, reconfigure the startup configuration by using configuration commands, save the configuration into the startup configuration file, and then restart the switch.			
2	E3	CONSOLE	01800002	`Can not execute config command.`
	The `show running-config` operation command could not be executed. [Action] Re-execute the command. If there is no change after re-execution of the command, restart the switch.			
3	E3	CONSOLE	01800003	`Configuration command syntax error. line` *<line number>* `: "`*<error syntax>*`"`
	A command entry error occurred because of *<error syntax>* on line *<line number>*. Alternatively, a command entry error occurred because *<error syntax>* on line *<line number>* is not a configuration command. *<line number>*: The number of the line where the error occurred *<error syntax>*: Entered command [Action] Enter valid settings on the target line in the configuration displayed by executing the `show startup-config` operation command.			

No.	Event level	Event location	Message ID	Message text
	Description			
4	E3	CONSOLE	01800004	`This system started with an emergency configuration file, because the startup configuration file is broken.`
	A startup configuration file is corrupted. [Action] 1. If the configuration file has a backup file saved, use the `copy` command to apply the saved file to the startup configuration file. 2. If you have not saved the configuration file, create a new configuration file. If this message is still collected, the flash memory might be corrupted.			

- E9 information

Table 2-2 Device-related E9 information when the event location is CONSOLE

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	CONSOLE	01800001	`Software error.`
	The semaphore ID processing failed during initialization when the switch started. [Action] None. The switch automatically restarts.			

2.2 Login

2.2.1 Event location = SESSION

The following tables describe device failure and event information when the event location is SESSION.

- E3 information

Table 2-3 Device-related E3 information when the event location is SESSION

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	SESSION	00e00000	Authentication login *xxxxxxxx* RADIUS accept.
	RADIUS authentication succeeded. *xxxxxxxx*: User name [Action] None.			
2	E3	SESSION	00e00001	Authentication login *xxxxxxxx* RADIUS reject.
	RADIUS authentication failed. *xxxxxxxx*: User name [Action] 1. There might have been an unauthorized access to the Switch from a remote host permitted by the configuration. Check the operating status of the remote host. 2. This log data is collected even when a legitimate user executes an incorrect operation (such as incorrect password entry) during login. Therefore, although this log data has been collected, the operating status of the remote host might be correct. 3. Check the RADIUS server setting.			
3	E3	SESSION	00e00002	Authentication login *xxxxxxxx* RADIUS no response.
	During RADIUS authentication, the RADIUS server did not respond. *xxxxxxxx*: User name [Action] 1. Check the configuration to make sure that the RADIUS server IP address is correct. 2. Check the RADIUS server configuration to make sure that the RADIUS server port number is correct.			
4	E3	SESSION	00e00003	Authentication login *xxxxxxxx* RADIUS server configuration is not defined.
	A RADIUS server has not been set for RADIUS authentication. *xxxxxxxx*: User name [Action] Check that a RADIUS configuration is set up.			

No.	Event level	Event location	Message ID	Message text
	Description			
5	E3	SESSION	00e00004	`Authentication login` *xxxxxxxx* `RADIUS over request.`
	During RADIUS authentication, the maximum number (256) of simultaneous transmissions to the RADIUS server was exceeded. *xxxxxxxx*: User name [Action] The load resulting from the RADIUS authentication request is high. If the problem is temporary, log in again. If the problem occurs repeatedly, review the system configuration.			
6	E3	SESSION	00e00006	`Authentication login` *xxxxxxxx* `RADIUS invalid server specified.`
	An internal error occurred during RADIUS authentication. *xxxxxxxx*: User name [Action] None.			
7	E3	SESSION	00e00007	`Authentication login` *xxxxxxxx* `RADIUS return error. code =` *xx*
	An internal error occurred during RADIUS authentication. *xxxxxxxx*: User name `code =` *xx*: Cause code (information for vendor analysis) [Action] None.			
8	E3	SESSION	00e00008	`Authentication login` *xxxxxxxx* `RADIUS time out.`
	A timeout occurred during RADIUS authentication. *xxxxxxxx*: User name [Action] Log in again.			
9	E3	SESSION	00e00100	`'users file' is corrupted. Started by default.`
	`users file` is corrupted. Startup was performed as the default user. [Action] None.			
10	E3	SESSION	00e00101	`Failed to write 'users file'.`
	Writing to the `users file` file failed. [Action] Execute the `format flash` operation command.			

No.	Event level	Event location	Message ID	Message text
	Description			
11	E3	SESSION	00e02000	`Unknown host address <ip address>`
	An attempt to connect to the Switch via Telnet or FTP from *<ip address>* was not permitted. *<ip address>*: The IPv4 or IPv6 address [Action] 1. Unauthorized access (access from a remote host not authorized in the configuration) to the Switch might have been attempted. Check the remote access permissions for *<ip address>*. 2. If remote access from *<ip address>* is permitted, the configuration might be incorrect. Check the configuration settings. 3. If you want to permit remote access from *<ip address>*, set the access permissions in the configuration.			
12	E3	SESSION	00e02001	`Login incorrect xxxxxxxx.`
	A login attempt failed. *xxxxxxxx*: User name [Action] 1. There might have been an unauthorized access (failed account or password authentication) to the Switch from a remote host permitted at the console or in the configuration. Check the operating status of the permitted remote host from the console or in the configuration. 2. This log data is collected even when a legitimate user executes an incorrect operation during login. Therefore, although this log data has been collected, the operating status of the remote host might be correct. 3. Check if the account was already registered for the Switch by using the `adduser` operation command. (How to check: Use the `show users` operation command to check the information that has been registered.)			
13	E3	SESSION	00e02002	`Login refused for too many users logged in.`
	An attempt to connect via Telnet or FTP was refused because too many users are logged in. [Action] 1. Check the number of users who are currently logged in. 2. If necessary, in the configuration increase the limit for the number of users who can log in.			
14	E3	SESSION	00e02003	`Login xxxxxxxx from console.`
	A user (*xxxxxxxx*) logged in via RS232C (console). *xxxxxxxx*: User name [Action] None.			
15	E3	SESSION	00e02003	`Login xxxxxxxx from <ip address> (vtynn).`
	A user (*xxxxxxxx* `from` *<ip address>*) logged in via Telnet (vty*nn*). *xxxxxxxx*: User name *<ip address>*: The IPv4 or IPv6 address *nn*: 0 to 15 [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
16	E3	SESSION	00e02003	`Login` *xxxxxxxx* `from <`*ip address*`> (ftp).`
	A user (*xxxxxxxx* `from <`*ip address*`>`) logged in via FTP. *xxxxxxxx*: User name *<ip address>*: The IPv4 or IPv6 address [Action] None.			
17	E3	SESSION	00e02004	`Logout` *xxxxxxxx* `from console.`
	An RS232C (console) user (*xxxxxxxx*) logged out. *xxxxxxxx*: User name [Action] None.			
18	E3	SESSION	00e02004	`Logout` *xxxxxxxx* `from <`*ip address*`> (vty`*nn*`)`
	A Telnet (vty*nn*) user (*xxxxxxxx* `from <`*ip address*`>`) logged out. *xxxxxxxx*: User name *<ip address>*: The IPv4 or IPv6 address *nn*: 0 to 15 [Action] None.			
19	E3	SESSION	00e02004	`Logout` *xxxxxxxx* `from <`*ip address*`> (ftp).`
	An FTP user (*xxxxxxxx* `from <`*ip address*`>`) logged out. *xxxxxxxx*: User name *<ip address>*: The IPv4 or IPv6 address [Action] None.			

- E9 information

Table 2-4 Device-related E9 information when the event location is SESSION

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	SESSION	00e00002	`Authentication login` *xxxxxxxx* `RADIUS message queue error. errno =` *xx*
	An internal error (message queue error response) occurred during RADIUS authentication. *xxxxxxxx*: User name `errno =` *xx*: Information for vendor analysis [Action] None. The switch automatically restarts.			

2.2.2 Event location = TELNETC

The following table describes device failure and event information when the event location is `TELNETC`.

- E3 information

Table 2-5 Device-related E3 information when the event location is TELNETC

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	TELNETC	01460101	`close session <ip address> (Serial)`
	An RS232C (serial) user forcibly closed a session. *<ip address>*: The IPv4 or IPv6 address [Action] None.			
2	E3	TELNETC	01460102	`close session <ip address> (Telnet)`
	A Telnet user forcibly closed a session. *<ip address>*: The IPv4 or IPv6 address [Action] None.			
3	E3	TELNETC	01460103	`disconnected of logout <ip address> (Serial)`
	An RS232C (serial) user logged out normally from a Telnet client session. *<ip address>*: The IPv4 or IPv6 address [Action] None.			
4	E3	TELNETC	01460104	`disconnected of logout <ip address> (Telnet)`
	A Telnet user logged out normally from a Telnet client session. *<ip address>*: The IPv4 or IPv6 address [Action] None.			
5	E3	TELNETC	01460105	`socket open error`
	A connection with the host failed. [Action] Log in again. If this error occurs repeatedly, restart the switch.			
6	E3	TELNETC	01460106	`socket option set error`
	A connection with the host failed. [Action] Log in again. If this error occurs repeatedly, restart the switch.			

No.	Event level	Event location	Message ID	Message text
	Description			
7	E3	TELNETC	01460107	`connection time out`
	A connection failed because of a timeout. [Action] Check whether the remote switch permits login via Telnet, and then log in again. If this error occurs repeatedly, restart the switch.			
8	E3	TELNETC	01460108	`rejection echo option of server`
	An echo request was rejected. [Action] If this error occurs repeatedly, restart the switch.			
9	E3	TELNETC	01460109	`rejection full duplex option of server`
	A full-duplex communication request was rejected. [Action] If this error occurs repeatedly, restart the switch.			
10	E3	TELNETC	0146010a	`disconnected <ip address> (Serial)`
	An RS232C (serial) user closed a Telnet client session. *<ip address>*: The IPv4 or IPv6 address [Action] None.			
11	E3	TELNETC	0146010b	`disconnected <ip address> (Telnet)`
	A Telnet user closed a Telnet client session. *<ip address>*: The IPv4 or IPv6 address [Action] None.			
12	E3	TELNETC	01460111	`connected to <ip address> (Serial)`
	An RS232C (serial) user connected normally to a Telnet client login. *<ip address>*: The IPv4 or IPv6 address [Action] None.			
13	E3	TELNETC	01460112	`connected to <ip address> (Telnet)`
	A Telnet user connected normally to a Telnet client login. *<ip address>*: The IPv4 or IPv6 address [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
14	E3	TELNETC	01460113	`connection network unreachable <ip address>`
	A connection with the host failed. *<ip address>*: The IPv4 or IPv6 address [Action] 1. Check whether the IP address of the remote switch is correct. 2. Check whether pinging reaches the remote switch.			
15	E3	TELNETC	01460114	`connection no route to host <ip address>`
	A connection with the host failed. *<ip address>*: The IPv4 or IPv6 address [Action] 1. Check whether the IP address of the remote switch is correct. 2. Check whether pinging reaches the remote switch.			

2.3 Protocol

2.3.1 Event location = STP

The following tables describe device failure and event information when the event location is STP.

- E3 information

Table 2-6 Device-related E3 information when the event location is STP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	STP	00100002	(*<mode>*) : This bridge becomes the Root Bridge.
	The Switch has become the root bridge. *<mode>*: Spanning Tree type ● single: Single Spanning Tree ● PVST+:VLAN *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID [Action] None.			
2	E3	STP	00100003	(*<mode>*) : This bridge becomes the Designated Bridge.
	The Switch has become the designated bridge. *<mode>*: Spanning Tree type ● single: Single Spanning Tree ● PVST+:VLAN *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID [Action] None.			
3	E3	STP	00100006	(*<mode>*) : Topology change detected - BPDU Timeout detected on the root port(*<IF#>*).
	A BPDU timeout was detected on the root port. *<mode>*: Spanning Tree type ● single: Single Spanning Tree ● PVST+:VLAN *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● CIST: Multiple Spanning Tree (CIST) ● MST Instance *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<IF#>*: Interface port number [Action] Check the line status.			

No.	Event level	Event location	Message ID	Message text
	Description			
4	E3	STP	00100007	`(<mode>) : Topology change detected - Topology Change Notification BPDU received on the port(<IF#>).`
	A BPDU for topology change was received. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `MST`: Multiple Spanning Tree *<IF#>*: Interface port number [Action] Check the line status.			
5	E3	STP	00100011	`(<mode>) : Spanning Tree Protocol enabled - BPDU received on the Port Fast(<IF#>).`
	A port has become subject to the Spanning Tree Protocol because the port was set with the `PortFast` functionality and received a BPDU. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `MST`: Multiple Spanning Tree *<IF#>*: Interface port number [Action] Check the line status.			
6	E3	STP	00100012	`(<mode>) : Topology change detected - BPDU Timeout detected on the root port(ChGr:<Channel group#>).`
	A BPDU timeout was detected on the root port. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Channel group#>*: Channel group number [Action] Check the line status.			

No.	Event level	Event location	Message ID	Message text
	Description			
7	E3	STP	00100013	`(<mode>) : Topology change detected - Topology Change Notification BPDU received on the port(ChGr:<Channel group#>).`
	A BPDU for topology change was received. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `MST`: Multiple Spanning Tree *<Channel group#>*: Channel group number [Action] Check the line status.			
8	E3	STP	00100014	`(<mode>) : Spanning Tree Protocol enabled - BPDU received on the Port Fast(ChGr:<Channel group#>).`
	A port has become subject to the Spanning Tree Protocol because the port was set with the `PortFast` functionality and received a BPDU. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `MST`: Multiple Spanning Tree *<Channel group#>*: Channel group number [Action] Check the line status.			
9	E3	STP	00100022	`: Cleared MAC Address Table entry.`
	A MAC address table entry was cleared because a BPDU for topology change was received. [Action] None.			
10	E3	STP	00100023	`(<mode>) : Topology change detected - BPDU Timeout detected on the alternate port(<IF#>).`
	A BPDU timeout was detected on the alternate port. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<IF#>*: Interface port number [Action] Check the line status.			

No.	Event level	Event location	Message ID	Message text
	Description			
11	E3	STP	00100024	`(<mode>) : Topology change detected - BPDU Timeout detected on the backup port(<IF#>).`
	A BPDU timeout was detected on the backup port. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<IF#>*: Interface port number [Action] Check the line status.			
12	E3	STP	00100025	`(<mode>) : Topology change detected - BPDU Timeout detected on the alternate port(ChGr:<Channel group#>).`
	A BPDU timeout was detected on the alternate port. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Channel group#>*: Channel group number [Action] Check the line status.			
13	E3	STP	00100026	`(<mode>) : Topology change detected - BPDU Timeout detected on the backup port(ChGr:<Channel group#>).`
	A BPDU timeout was detected on the backup port. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Channel group#>*: Channel group number [Action] Check the line status.			
14	E3	STP	00100027	`(MST) : This bridge becomes the CIST Root Bridge.`
	The Switch has become the CIST root bridge. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
15	E3	STP	00100028	`(CIST) : This bridge becomes the CIST Regional Root Bridge.`
	The Switch has become the CIST regional root bridge. [Action] None.			
16	E3	STP	00100029	`(MST Instance <`*MSTI ID*`>) : This bridge becomes the MSTI Regional Root Bridge.`
	The Switch has become the MSTI regional root bridge. *<MSTI ID>*: MST instance ID [Action] None.			
17	E3	STP	00100031	`(CIST) : This bridge becomes the CIST Regional Designated Bridge.`
	The Switch has become the CIST regional designated bridge. [Action] None.			
18	E3	STP	00100032	`(MST Instance <`*MSTI ID*`>) : This bridge becomes the MSTI Regional Designated Bridge.`
	The Switch has become the MSTI regional designated bridge. *<MSTI ID>*: MST instance ID [Action] None.			
19	E3	STP	00100042	`(<`*mode*`>) : Topology change detected - BPDU Timeout detected on the root port(VLID:<`*Link ID*`>).`
	A BPDU timeout was detected on the root port. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Link ID>*: Virtual link ID [Action] Check the line status.			

No.	Event level	Event location	Message ID	Message text
	Description			
20	E3	STP	00100043	`(<mode>) : Topology change detected - Topology Change Notification BPDU received on the port(VLID:<Link ID>).`
	A BPDU for topology change was received. <*mode*>: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` <*VLAN ID*>: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` <*MSTI ID*>: Multiple Spanning Tree (MSTI) and MST instance ID <*Link ID*>: Virtual link ID [Action] Check the line status.			
21	E3	STP	00100044	`(<mode>) : Topology change detected - BPDU Timeout detected on the alternate port(VLID:<Link ID>).`
	A BPDU timeout was detected on the alternate port. <*mode*>: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` <*VLAN ID*>: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` <*MSTI ID*>: Multiple Spanning Tree (MSTI) and MST instance ID <*Link ID*>: Virtual link ID [Action] Check the line status.			
22	E3	STP	00100045	`(<mode>) : Topology change detected - BPDU Timeout detected on the backup port(VLID:<Link ID>).`
	A BPDU timeout was detected on the backup port. <*mode*>: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` <*VLAN ID*>: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` <*MSTI ID*>: Multiple Spanning Tree (MSTI) and MST instance ID <*Link ID*>: Virtual link ID [Action] Check the line status.			

- E4 information

Table 2-7 Device-related E4 information when the event location is STP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	STP	00100008	`(<mode>) : Port status becomes Forwarding on the port(<IF#>).`
	The port changed to the forwarding status. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<IF#>*: Interface port number [Action] None.			
2	E4	STP	00100009	`(<mode>) : Port status becomes Blocking on the port(<IF#>).`
	The port changed to the blocking status. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree and MST instance ID *<IF#>*: Interface port number [Action] None.			
3	E4	STP	00100010	`(<mode>) : Port status becomes Down - BPDU received on the BPDU GUARD port(<IF#>).`
	The port was placed in the down status because it was set with the BPDU guard functionality and received a BPDU. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `MST`: Multiple Spanning Tree *<IF#>*: Interface port number [Action] Check the line status.			

No.	Event level	Event location	Message ID	Message text
	Description			
4	E4	STP	00100015	`(<mode>) : Port status becomes Forwarding on the port (ChGr : <Channel group#>).`
	The port changed to the forwarding status. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Channel group#>*: Channel group number [Action] None.			
5	E4	STP	00100016	`(<mode>) : Port status becomes Blocking on the port(ChGr:<Channel group#>).`
	The port changed to the blocking status. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Channel group#>*: Channel group number [Action] None.			
6	E4	STP	00100017	`(<mode>) : Port status becomes Down - BPDU received on the BPDU GUARD port(ChGr:<Channel group#>).`
	The port was placed in the down status because it was set with the BPDU guard functionality and received a BPDU. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `MST`: Multiple Spanning Tree *<Channel group#>*: Channel group number [Action] Check the line status.			

No.	Event level	Event location	Message ID	Message text
	Description			
7	E4	STP	00100037	(<*mode*>) : Port status becomes Blocking on the port(<*IF#*>), because IEEE 802.1Q Tagged BPDU was received from the port which is not trunk port.
	Even though there was a setting (using an Untagged frame) for an access port, protocol port, or MAC port, the switch received a BPDU with an IEEE 802.1Q tag attached. Because of this, the port was placed in the blocking status. <*mode*>: Spanning Tree type ● PVST+:VLAN <*VLAN ID*>: PVST+ Spanning Tree Protocol and VLAN ID <*IF#*>: Interface port number [Action] Check the settings of the partner switch.			
8	E4	STP	00100038	(<*mode*>) : Port status becomes Blocking on the port(ChGr:<*Channel group#*>), because IEEE 802.1Q Tagged BPDU was received from the port which is not trunk port.
	Even though there was a setting (using an Untagged frame) for an access port, protocol port, or MAC port, the switch received a BPDU with an IEEE 802.1Q tag attached. Because of this, the port was placed in the blocking status. <*mode*>: Spanning Tree type ● PVST+:VLAN <*VLAN ID*>: PVST+ Spanning Tree Protocol and VLAN ID <*Channel group#*>: Channel group number [Action] Check the settings of the partner switch.			
9	E4	STP	00100039	: Exceeded the number of the maximum spanning tree.
	The number of trees exceeds the maximum capacity of the Spanning Tree Protocol. No more trees can be added. [Action] Either review the network configuration, or use a Single Spanning Tree or Multiple Spanning Tree. Note, however, that if multiple VLANs are used, this log data might have been collected at startup. If PVST+ is not being used, no action is required.			

No.	Event level	Event location	Message ID	Message text
	Description			
10	E4	STP	00100040	`(<mode>) : Port status becomes Blocking - BPDU that priority is high was received on the ROOT GUARD port(<IF#>).`
	The port was placed in the blocking status because it was set with the root guard functionality and received a high-priority BPDU. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<IF#>*: Interface port number [Action] Check the settings of the partner switch.			
11	E4	STP	00100041	`(<mode>) : Port status becomes Blocking - BPDU that priority is high was received on the ROOT GUARD port(ChGr:<Channel group#>).`
	The port was placed in the blocking status because it was set with the root guard functionality and received a high-priority BPDU. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Channel group#>*: Channel group number [Action] Check the settings of the partner switch.			
12	E4	STP	00100047	`(<mode>) : Port status becomes Forwarding on the port(VLID:<Link ID>).`
	The port changed to the forwarding status. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree (MSTI) and MST instance ID *<Link ID>*: Virtual link ID [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
13	E4	STP	00100048	`(<mode>) : Port status becomes Blocking on the port(VLID:<Link ID>).`
	The port changed to the blocking status. *<mode>*: Spanning Tree type ● `single`: Single Spanning Tree ● `PVST+:VLAN` *<VLAN ID>*: PVST+ Spanning Tree Protocol and VLAN ID ● `CIST`: Multiple Spanning Tree (CIST) ● `MST Instance` *<MSTI ID>*: Multiple Spanning Tree and MST instance ID *<Link ID>*: Virtual link ID [Action] None.			

- E9 information

Table 2-8 Device-related E9 information when the event location is STP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	STP	00100000	*<comment>*
	An unexpected error occurred in the Spanning Tree Protocol. *<comment>*: Cause information (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.3.2 Event location = GSRP

The following table describes device failure and event information when the event location is GSRP.

- E3 information

Table 2-9 Device-related E3 information when the event location is GSRP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	GSRP	00200015	GSRP aware : MAC Address Table entry cleared, because GSRP flush request received on port *<port list>*, GSRP *<gsrp group id>* VLAN group *<vlan group id>* Source MAC address *<mac address>*.
	The MAC address table was cleared because a GSRP flush request frame was received. *<port list>*: Interface port number (Peer-link is displayed when the request is received by a peer link port.) *<gsrp group id>*: GSRP group number (information related to the GSRP switch which sent a GSRP flush request frame) *<vlan group id>*: VLAN group number (information related to the GSRP switch which sent a GSRP flush request frame) *<mac address>*: MAC address (information related to the GSRP switch which sent a GSRP flush request frame) [Action] None.			

2.3.3 Event location = VLAN

The following tables describe device failure and event information when the event location is VLAN.

- E3 information

Table 2-10 Device-related E3 information when the event location is VLAN

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	VLAN	00700005	The MAC-VLAN MAC Address entry is replaced from dynamic with Configuration.
	A dynamic MAC address entry of the MAC VLAN was replaced with the address specified by the mac-address configuration command because the dynamic MAC address entry was the same as the address specified by the mac-address configuration command. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E3	VLAN	00700019	`MAC Address Table entry cleared, because flush request received on port (<port number>), Source MAC address <mac address>(<func name>).`
	The MAC address table was cleared because a flush request frame was received. <*port number*>: Interface port number (0/*n*), or channel group number (CH: *n*), or peer link port (`Peer-link`) Peer link port applies only when the frame source functionality name is ULR. <*mac address*>: MAC address of the switch which sent a frame <*func name*>: Name of the functionality which sent a frame [Action] None.			
3	E3	VLAN	0070000a	`VLAN (<VLAN ID>) is auto-registered on the port(<IF#>).`
	A VLAN was automatically registered on the port by automatic VLAN allocation. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None.			
4	E3	VLAN	0070000b	`VLAN (<VLAN ID>) is auto-unregistered on the port(<IF#>).`
	A VLAN was automatically removed from the port by automatic VLAN de-allocation. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None.			
5	E3	VLAN	0070000c	`VLAN (<VLAN ID>) is auto-registered on the channel(<Channel group#>).`
	A VLAN was automatically registered on the channel by automatic VLAN allocation. <*VLAN ID*>: VLAN ID <*Channel group#*>: Channel group number [Action] None.			
6	E3	VLAN	0070000d	`VLAN (<VLAN ID>) is auto-unregistered on the channel(<Channel group#>).`
	A VLAN was automatically removed from the channel by automatic VLAN de-allocation. <*VLAN ID*>: VLAN ID <*Channel group#*>: Channel group number [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
7	E3	VLAN	0070000e	`Sum of number of VLAN on ports exceeded capacity.`
	The total number of VLANs for all ports exceeds the device capacity limit. [Action] Change the total number of VLANs to within the capacity limit, and restart the switch.			

- E4 information

Table 2-11 Device-related E4 information when the event location is VLAN

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	VLAN	00700001	`VLAN (<VLAN ID>) Status is Up.`
	The VLAN is in the `Up` status. *<VLAN ID>*: VLAN ID [Action] None.			
2	E4	VLAN	00700002	`VLAN (<VLAN ID>) Status is Down.`
	The VLAN is in the `Down` status. *<VLAN ID>*: VLAN ID [Action] Check the status of lines that belong to the VLAN.			
3	E4	VLAN	00700003	`The MAC-VLAN MAC Address Configuration can't be registered at hardware tables.`
	An address entry specified by the MAC VLAN configuration command `mac-address` could not be set in the hardware table. [Action] Review the system configuration.			
4	E4	VLAN	00700004	`The MAC-VLAN MAC Address entry can't be registered at hardware tables.`
	A dynamic MAC address entry of the MAC VLAN could not be set in the hardware. [Action] Review the system configuration.			

No.	Event level	Event location	Message ID	Message text
	Description			
5	E4	VLAN	00700007	`The MAC Address entry can't be registered at hardware tables(VLAN:<VLAN ID> MAC address:<MAC address>).`
	A MAC address entry could not be set in the hardware table. (A hash entry overflow occurred because a hash conflict occurred in the MAC address table.) <*VLAN ID*>: VLAN ID <*MAC address*>: MAC address [Action] None.			
6	E4	VLAN	0070000f	`The vlan mapping configuration can't be registered at hardware tables.`
	The tag conversion information could not be set in the hardware table. (A hash entry overflow occurred because a hash conflict occurred in the tag conversion information.) [Action] None.			
7	E4	VLAN	00700100	`L2LD : Port(<IF#>) inactivated because of loop detection. from port(<IF#>).`
	The active port has been blocked because a loop failure was detected. <*IF#*>: Interface port number [Action] Check the network configuration.			
8	E4	VLAN	00700101	`L2LD : Port(<IF#>) inactivated because of loop detection. from ChGr(<Channel group#>).`
	The active port has been blocked because a loop failure was detected. <*IF#*>: Interface port number <*Channel group#*>: Channel group number [Action] Check the network configuration.			
9	E4	VLAN	00700102	`L2LD : ChGr(<Channel group#>) inactivated because of loop detection. from port(<IF#>).`
	The active port has been blocked because a loop failure was detected. <*Channel group#*>: Channel group number <*IF#*>: Interface port number [Action] Check the network configuration.			

No.	Event level	Event location	Message ID	Message text
	Description			
10	E4	VLAN	00700103	`L2LD : ChGr(<Channel group#>) inactivated because of loop detection. from ChGr(<Channel group#>).`
	The active port has been blocked because a loop failure was detected. <*Channel group#*>: Channel group number [Action] Check the network configuration.			
11	E4	VLAN	00700104	`L2LD : Port(<IF#>) loop detection. from port (<IF#>).`
	A loop failure was detected. <*IF#*>: Interface port number [Action] Check the network configuration.			
12	E4	VLAN	00700105	`L2LD : Port(<IF#>) loop detection. from ChGr(<Channel group#>).`
	A loop failure was detected. <*IF#*>: Interface port number <*Channel group#*>: Channel group number [Action] Check the network configuration.			
13	E4	VLAN	00700106	`L2LD : ChGr(<Channel group#>) loop detection. from port (<IF#>).`
	A loop failure was detected. <*Channel group#*>: Channel group number <*IF#*>: Interface port number [Action] Check the network configuration.			
14	E4	VLAN	00700107	`L2LD : ChGr(<Channel group#>) loop detection. from ChGr(<Channel group#>).`
	A loop failure was detected. <*Channel group#*>: Channel group number [Action] Check the network configuration.			
15	E4	VLAN	00700108	`L2LD : ChGr(<Channel group#>) activate by automatic restoration of the L2loop detection function.`
	A port will be activated by the automatic restoration of the L2 loop detection functionality. <*Channel group#*>: Channel group number [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
16	E4	VLAN	00700109	`L2LD : Port(<IF#>) activate by automatic restoration of the L2loop detection function.`
	A port will be activated by the automatic restoration of the L2 loop detection functionality. <*IF#*>: Interface port number [Action] None.			
17	E4	VLAN	0070010a	`L2LD : L2loop detection frame cannot be sent in the port where capacity was exceeded.`
	The number of ports that can send L2 loop detection frames exceeds the capacity limit. Ports exceeding the capacity limit cannot send L2 loop detection frames. [Action] Decrease the number of ports sending L2 loop detection frames. Note, however, that if many VLANs are used, this log data might have been collected at the switch startup. When this log is collected, if the `show loop detection` operation command is executed and the configuration value does not exceed the capacity, there is no problem.			
18	E4	VLAN	0070010b	`L2LD : Peer-link loop detection. from port (<IF#>).`
	A loop failure was detected. <*IF#*>: Interface port number [Action] Check the network configuration.			
19	E4	VLAN	0070010c	`L2LD : Peer-link loop detection. from ChGr(<Channel group#>).`
	A loop failure was detected. <*Channel group#*>: Channel group number [Action] Check the network configuration.			

- E9 information

Table 2-12 Device-related E9 information when the event location is VLAN

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	VLAN	00700201	`L2LD : SendTask process VLANCallBackSetErr[xx].`
	An error occurred when the `VLANCALLBACK` functionality was registered. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.3.4 Event location = VLAN (Ring Protocol)

The following tables describe device failure and event information when the event location is `VLAN` (Ring Protocol).

- E3 information

Table 2-13 Device-related E3 information when the event location is VLAN (Ring Protocol)

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	VLAN	00700702	`AXRP <Ring ID> : cleared MAC address table by receiving flush request frames.`
	A flush control frame was received, and the MAC address table was cleared. The switch outputs this message when it clears a MAC address table whose output destination is a ring port. *<Ring ID>*: Ring ID [Action] None.			
2	E3	VLAN	00700703	`AXRP <Ring ID> : cleared MAC address table by timeout of forwarding-shift-timer.`
	A MAC address table was cleared because of a forwarding-shift-time timeout. The switch outputs this message when a forwarding-shift-time timeout was detected on the transit node and the MAC address table was cleared. *<Ring ID>*: Ring ID [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
3	E3	VLAN	00700771	`AXRP <Ring ID> : activated state monitoring.`
	Status monitoring by the Ring Protocol was started. The switch outputs this message when an initialization of the Ring Protocol was completed and the operation mode of the Ring Protocol configuration was set to the master mode. *<Ring ID>*: Ring ID [Action] None.			
4	E3	VLAN	00700772	`AXRP <Ring ID> : detected fault recovery by receiving health check frames.`
	A failure recovery was detected during status monitoring by the Ring Protocol. The switch outputs this message when it receives a health-check frame at the master node and detects a recovery from a failure. *<Ring ID>*: Ring ID [Action] None.			
5	E3	VLAN	00700773	`AXRP (virtual-link <Link ID>) : cleared MAC address table by receiving flush frames.`
	A flush control frame for virtual link was received in the Ring Protocol and the MAC address table was cleared. The switch outputs this message when all entries in the MAC address table that are learning in the ring ports are cleared. *<Link ID>*: Virtual link ID [Action] None.			
6	E3	VLAN	00700774	`AXRP <Ring ID> : detected fault recovery by receiving health check frames, but suspended the fault recovery process.`
	A failure recovery was detected during status monitoring by the Ring Protocol, but the path switch-back was suppressed due to the setting. The switch outputs this message when it detects a recovery from a failure at the master node. *<Ring ID>*: Ring ID [Action] Wait for the suspension time specified by the `preempt-delay` configuration command to be timed out, or use the `clear axrp preempt-delay` command to cancel the suspended status of the path switch-back manually.			
7	E3	VLAN	00700775	`AXRP <Ring ID> : canceled the suspension of the fault recovery process.`
	Suspended status for the path switch-back of the Ring Protocol was canceled. The switch outputs this message when the path switch-back suppression state is removed during such suppression at the master node. *<Ring ID>*: Ring ID [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
8	E3	VLAN	00700776	AXRP *<Ring ID>* : activated multi fault state monitoring.
	Multi-fault monitoring for Ring Protocol was started. *<Ring ID>*: Ring ID [Action] None.			
9	E3	VLAN	00700777	AXRP *<Ring ID>* : detected multi fault recovery by receiving multi fault detection frames.
	A multi-fault recovery was detected when multi-fault monitoring the Ring Protocol. The switch outputs this message when it receives a multi-fault monitoring frame at a shared node and detects recovery from multiple faults. *<Ring ID>*: Ring ID [Action] None.			
10	E3	VLAN	00700778	AXRP (multi-fault-detection *<Ring ID>*) : cleared MAC address table by receiving flush frames.
	A flush control frame for multi-fault was received and the MAC address table was cleared. The switch outputs this message when it clears the MAC address table of a ring port that supports the ring ID that applies multi-fault monitoring. *<Ring ID>*: Ring ID [Action] None.			

- E4 information

Table 2-14 Device-related E4 information when the event location is VLAN (Ring Protocol)

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	VLAN	00700779	AXRP *<Ring ID>* : detected fault by health check timeout.
	A failure was detected during status monitoring by the Ring Protocol. The switch outputs this message when it detects a health-check timeout at the master node. *<Ring ID>*: Ring ID [Action] A failure might have occurred in the link or on the node of the applicable ring. Check the status of the link and the node.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E4	VLAN	00700780	`AXRP <Ring ID> : detected multi fault by multi fault detection timeout.`
	A multi-fault was detected when multi-fault monitoring the status of the Ring Protocol. The switch outputs this message when the multi-fault monitoring functionality detects a timeout at the shared node. *<Ring ID>*: Ring ID [Action] A multi-fault might have occurred in the applicable ring. Check the status of the link and the node.			

- E9 information

Table 2-15 Device-related E9 information when the event location is VLAN (Ring Protocol)

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	VLAN	00700701	`Swd Configuration Error. <comment>`
	The Ring Protocol configuration could not be set for the hardware controller. *<comment>*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.3.5 Event location = VLAN (CFM)

The following tables describe device failure and event information when the event location is VLAN (CFM).

- E4 information

Table 2-16 Device-related E4 information when the event location is VLAN (CFM)

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	VLAN	00700500	`MD Level <Level> MA <No.>: detected on fault of OtherCCM in MEP <MEPID>.`
	The relevant MEP detected a fault (OtherCCM). *<Level>*: Domain level *<No.>*: MA identification number *<MEPID>*: MEP ID [Action] A partner switch is not recognized as the same MA. Check that the domain level, MA ID, domain name, and MA name match the partner switches.			
2	E4	VLAN	00700501	`MD Level <Level> MA <No.>: detected on fault of ErrorCCM in MEP <MEPID>.`
	The relevant MEP detected a fault (ErrorCCM). *<Level>*: Domain level *<No.>*: MA identification number *<MEPID>*: MEP ID [Action] A partner switch and the configuration do not match. Check whether the MEP ID is different from the partner switch, and make sure the send interval (`interval`) matches that of the partner switch.			
3	E4	VLAN	00700502	`MD Level <Level> MA <No.>: detected on fault of Timeout in MEP <MEPID>.`
	The relevant MEP detected a fault (Timeout). *<Level>*: Domain level *<No.>*: MA identification number *<MEPID>*: MEP ID [Action] The switch is not receiving CCM from partner switches. Check the network status.			

No.	Event level	Event location	Message ID	Message text
	Description			
4	E4	VLAN	00700503	`MD Level <Level> MA <No.>: detected on fault of PortState in MEP <MEPID>.`
	The relevant MEP detected a fault (PortState). <*Level*>: Domain level <*No.*>: MA identification number <*MEPID*>: MEP ID [Action] A partner switch line fault or a port blocking status was detected. Check the status of the partner switch.			
5	E4	VLAN	00700504	`MD Level <Level> MA <No.>: detected on fault of RDI in MEP <MEPID>.`
	The relevant MEP detected a fault (RDI). <*Level*>: Domain level <*No.*>: MA identification number <*MEPID*>: MEP ID [Action] A fault was detected in a partner switch. Check the status of the partner switch.			

- E9 information

Table 2-17 Device-related E9 information when the event location is VLAN (CFM)

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	VLAN	00700510	`Swd Configuration Error. (Code1=xx Code2=xx)`
	The CFM configuration could not be set for the hardware controller. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			
2	E9	VLAN	00700511	`Could not start CFM function. (Code=xx)`
	The CFM functionality could not start. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.3.6 Event location = SNOOP

The following tables describe device failure and event information when the event location is SNOOP.

- E3 information

Table 2-18 Device-related E3 information when the event location is SNOOP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	SNOOP	02e10000	The number of the snooping entry exceeded the capacity of this system.
	An attempt to register an IPv4 multicast group failed because the number of learning entries used in IGMP snooping exceeds the device capacity limit. [Action] The number of entries exceeds the capacity limit. Review the system configuration and setting so that you can reduce the number of entries.			
2	E3	SNOOP	02e11100	IGMP querier changed on VLAN <*VLAN ID*> - lost IGMP querier address <*IPv4 address*>.
	IPv4 multicast data is not being properly forwarded because the availability of the IPv4 multicast group member (recipient host) cannot be confirmed, for the following reasons: The IGMP querier information was deleted because advertisement (IGMP Query) from the IGMP querier at <*IPv4 address*> on VLAN <*VLAN-ID*> disappeared. If the Switch is the IGMP querier, the IGMP querier information was deleted because the IP address of VLAN <*VLAN-ID*> was deleted. <*VLAN ID*>: VLAN ID <*IPv4 address*>: IPv4 address [Action] 1. Check the connection with the IGMP querier at <*IPv4 address*>. 2. Check whether the IGMP querier change message (IGMP querier changed on VLAN <*VLAN ID*> - new IGMP querier address <*IPv4 address*>.) was output. 3. If the connection with the IGMP querier cannot be checked, execute the configuration command ip igmp snooping querier to enable the IGMP querier functionality of the Switch.			
3	E3	SNOOP	02e11200	IGMP querier changed on VLAN <*VLAN ID*> - new IGMP querier address <*IPv4 address*>.
	The IGMP querier was changed to <*IPv4 address*> because a new IGMP querier was identified on the VLAN (<*VLAN ID*>). <*VLAN ID*>: VLAN ID <*IPv4 address*>: IPv4 address [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
4	E3	SNOOP	02e11300	`IPv4 address not defined on VLAN <VLAN ID>, IGMP querier function stopped.`
	The IGMP querier on the VLAN (*<VLAN ID>*) stopped because the IPv4 address is not set. *<VLAN ID>*: VLAN ID [Action] 1. Set an IPv4 address for the VLAN. 2. Execute the `show igmp-snooping` command and confirm that the IPv4 address set for the VLAN is displayed.			
5	E3	SNOOP	02e20000	`The number of the snooping entry exceeded the capacity of this system.`
	An attempt to register an IPv6 multicast group failed because the number of learning entries used in MLD snooping exceeds the device capacity limit. [Action] The number of entries exceeds the capacity limit. Review the system configuration and setting so that you can reduce the number of entries.			
6	E3	SNOOP	02e21100	`MLD querier changed on VLAN <VLAN ID> - lost MLD querier address <IPv6 address>.`
	IPv6 multicast data is not being properly forwarded because the availability of the IPv6 multicast group member (recipient host) cannot be confirmed, for the following reasons: The MLD querier information was deleted because an advertisement (MLD Query) from the MLD querier at *<IPv6 address>* on VLAN *<VLAN ID>* disappeared. *<VLAN ID>*: VLAN ID *<IPv6 address>*: IPv6 address [Action] 1. Check the connection with the MLD querier at *<IPv6 address>*. 2. Check whether the MLD querier change message (`MLD querier changed on VLAN <VLAN ID> - new MLD querier address <IPv6 address>.`) was output. 3. If the connection with the MLD querier cannot be checked, execute the configuration command `ipv6 mld snooping querier` to enable the MLD querier functionality of the Switch.			
7	E3	SNOOP	02e21200	`MLD querier changed on VLAN <VLAN ID> - new MLD querier address <IPv6 address>.`
	The MLD querier was changed to *<IPv6 address>* because a new MLD querier was identified on the VLAN (*<VLAN ID>*). *<VLAN ID>*: VLAN ID *<IPv6 address>*: IPv6 address [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
8	E3	SNOOP	02e21300	`MLD query message source address not defined on VLAN <VLAN ID>,MLD querier function stopped.`
	The MLD querier on the VLAN *<VLAN ID>* stopped because the source IP address for MLD query messages is not set. *<VLAN ID>*: VLAN ID [Action] 1. Set an MLD snooping source IPv6 address for the VLAN. 2. Execute the `show mld-snooping` command and confirm that the IPv6 address set for the VLAN is displayed.			

- E9 information

Table 2-19 Device-related E9 information when the event location is SNOOP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	SNOOP	02e13100	`IGMPsnooping: set snooping disable to filter by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred on VLAN *<VLAN ID>* when clearing the IGMP snooping settings for the hardware. *<VLAN ID>*: VLAN ID [Action] None. The switch automatically restarts.			
2	E9	SNOOP	02e13110	`IGMPsnooping: set snooping enable to filter by config, error(error code) occurred on VLAN <VLAN ID>.`
	An error (*error code*) occurred on the VLAN *<VLAN ID>* when configuring the IGMP snooping start settings for the hardware. *<VLAN ID>*: VLAN ID [Action] None. The switch automatically restarts.			
3	E9	SNOOP	02e13200	`IGMPsnooping: set snooping disable to filter by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when clearing the IGMP snooping setting for the hardware because the VLAN *<VLAN ID>* for which IGMP snooping is enabled was deleted. *<VLAN ID>*: VLAN ID [Action] None. The switch automatically restarts.			

No.	Event level	Event location	Message ID	Message text
	Description			
4	E9	SNOOP	02e13301	`IGMPsnooping: set port<IF#> mrouter enable to driver by snoop start, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred on the router port (`port<IF#>`) for the hardware when IGMP snooping started for the VLAN <*VLAN ID*>. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None. The switch automatically restarts.			
5	E9	SNOOP	02e13310	`IGMPsnooping: set port<IF#> mrouter disable to driver by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when VLAN <*VLAN ID*> router port (`port<IF#>`) settings for the hardware were cleared by the configuration. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None. The switch automatically restarts.			
6	E9	SNOOP	02e13311	`IGMPsnooping: set port<IF#> mrouter enable to driver by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when configuring the VLAN <*VLAN ID*> router port (`port<IF#>`) for the hardware. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None. The switch automatically restarts.			
7	E9	SNOOP	02e13320	`IGMPsnooping: set port<IF#> mrouter disable to driver by excluded vlan, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when the IGMP snooping router port settings for the hardware were cleared while the router settings were enabled because port (`port<IF#>`) belonging to VLAN <*VLAN ID*> was detached from the VLAN. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None. The switch automatically restarts.			

No.	Event level	Event location	Message ID	Message text
	Description			
8	E9	SNOOP	02e13321	`IGMPsnooping: set port<IF#> mrouter enable to driver by accommodated to vlan, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when the router port was set for the hardware with router port settings enabled because a port (`port<IF#>`) not belonging to VLAN <*VLAN ID*> was moved to it. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None. The switch automatically restarts.			
9	E9	SNOOP	02e23100	`MLDsnooping: set snooping disable to filter by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred on VLAN <*VLAN ID*> when clearing the MLD snooping settings for the hardware. <*VLAN ID*>: VLAN ID [Action] None. The switch automatically restarts.			
10	E9	SNOOP	02e23110	`MLDsnooping: set snooping enable to filter by config, error(error code) occurred on VLAN <VLAN ID>.`
	An error (*error code*) occurred on the VLAN <*VLAN ID*> when configuring the MLD snooping start settings for the hardware. <*VLAN ID*>: VLAN ID [Action] None. The switch automatically restarts.			
11	E9	SNOOP	02e23200	`MLDsnooping: set snooping disable to filter by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when the MLD snooping setting for the hardware was cleared because the VLAN <*VLAN ID*> for which MLD snooping is enabled was deleted. <*VLAN ID*>: VLAN ID [Action] None. The switch automatically restarts.			
12	E9	SNOOP	02e23301	`MLDsnooping: set port<IF#> mrouter enable to driver by snoop start, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred on a router port (`port<IF#>`) for the hardware when MLD snooping started for the VLAN <*VLAN ID*>. <*VLAN ID*>: VLAN ID <*IF#*>: Interface port number [Action] None. The switch automatically restarts.			

No.	Event level	Event location	Message ID	Message text
	Description			
13	E9	SNOOP	02e23310	`MLDsnooping: set port<IF#> mrouter disable to driver by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when VLAN *<VLAN ID>* router port (`port<IF#>`) settings for the hardware were cleared by the configuration. *<VLAN ID>*: VLAN ID *<IF#>*: Interface port number [Action] None. The switch automatically restarts.			
14	E9	SNOOP	02e23311	`MLDsnooping: set port<IF#> mrouter enable to driver by config, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when configuring the VLAN *<VLAN ID>* router port (`port<IF#>`) for the hardware. *<VLAN ID>*: VLAN ID *<IF#>*: Interface port number [Action] None. The switch automatically restarts.			
15	E9	SNOOP	02e23320	`MLDsnooping: set port<IF#> mrouter disable to driver by excluded vlan, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when MLD snooping router port settings for the hardware were released with router port settings enabled because a port (`port<IF#>`) contained in VLAN *<VLAN ID>* was detached from the VLAN. *<VLAN ID>*: VLAN ID *<IF#>*: Interface port number [Action] None. The switch automatically restarts.			
16	E9	SNOOP	02e23321	`MLDsnooping: set port<IF#> mrouter enable to driver by accommodated to vlan, error (error code) occurred on VLAN<VLAN ID>.`
	An error (*error code*) occurred when the router port was set for the hardware with router port settings enabled because a port (`port<IF#>`) not belonging to VLAN *<VLAN ID>* was moved to it. *<VLAN ID>*: VLAN ID *<IF#>*: Interface port number [Action] None. The switch automatically restarts.			

2.3.7 Event location = DHCP

The following tables describe device failure and event information when the event location is DHCP.

- E3 information

Table 2-20 Device-related E3 information when the event location is DHCP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	DHCP	01100101	The not used IP address which a dhcp_server can lease out is not a subnet *<SUBNET_ADDRESS>*.
	The unused IP addresses leased by the DHCP server do not exist in the subnet address. *<SUBNET_ADDRESS>*: Subnet address [Action] Examine the maximum number of DHCP clients in the subnet that the DHCP server can allocate.			
2	E3	DHCP	01100102	The dhcp_server reused the abandoned IP address *<IP_ADDRESS>*.
	The DHCP server reused a discarded IP address. *<IP_ADDRESS>*: Reused IP address [Action] None.			
3	E3	DHCP	01100103	The IP address *<IP_ADDRESS>* which the dhcp_server schedule to lease out is already used by others.
	The IP address to be leased by the DHCP server is already being used. *<IP_ADDRESS>*: IP address to be leased [Action] None.			

- E9 information

Table 2-21 Device-related E9 information when the event location is DHCP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	DHCP	01100901	Internal error occurred. (Code=*xx*)
	An internal processing error occurred. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.3.8 Event location = LINKAGG

The following tables describe device failure and event information when the event location is `LINKAGG`.

- E3 information

Table 2-22 Device-related E3 information when the event location is LINKAGG

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	LINKAGG	00500003	`Port <IF#> detached from Channel Group <Channel group#>.`
	Port <*IF#*> was detached from the channel group. <*IF#*>: Interface port number <*Channel group#*>: Channel group number [Action] 1. Check whether the connection with the remote switch is correct. 2. Check whether the remote switch is configured correctly.			
2	E3	LINKAGG	00500004	`Port <IF#> attached to Channel Group <Channel group#>.`
	A port was aggregated to the channel group. <*IF#*>: Interface port number <*Channel group#*>: Channel group number [Action] None.			

- E4 information

Table 2-23 Device-related E4 information when the event location is LINKAGG

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	LINKAGG	00500001	`Channel Group <Channel group#> is Down.`
	A channel group is in the `Down` status. <*Channel group#*>: Channel group number [Action] 1. Make sure that the line is not down. 2. Make sure that the line is not half duplex. 3. Make sure that the LACP setting of the remote switch is correct.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E4	LINKAGG	00500002	`Channel Group <Channel group#> is Up.`
	A channel group is in the `Up` status. *<Channel group#>*: Channel group number [Action] None.			

2.3.9 Event location = DHCPSN

The following table describes device failure and event information when the event location is `DHCPSN`.

- E3 information

Table 2-24 Device-related E3 information when the event location is DHCPSN

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	DHCPSN	03100001	`The binding entry created(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	A binding database was created. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] None.			
2	E3	DHCPSN	03100002	`The binding entry timeout(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	The binding database was deleted because of an aging timeout. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
3	E3	DHCPSN	03100003	`The binding entry was deleted by received DHCPRELEASE(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	The binding database was deleted because `DHCPRELEASE` was received. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] None.			
4	E3	DHCPSN	03100004	`The binding entry was deleted by received DHCPDECLINE(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	The binding database was deleted because `DHCPDECLINE` was received. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] None.			
5	E3	DHCPSN	03100005	`The binding entry is replaced from dynamic with Configuration(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	The contents of the binding database was changed to the settings of the `ip source binding` configuration command because the same IP address and VLAN number as those of the dynamically learned binding database had been set to the binding database by using the `ip source binding` configuration command. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] None.			
6	E3	DHCPSN	03100006	`The binding entry was renewed(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	The binding database was updated because the changes of connection ports or MAC addresses corresponding to IP addresses assigned to DHCP client terminals were detected by receiving `DHCPACK`/`BOOTPREPLY`. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
7	E3	DHCPSN	03100007	`It failed to make binding entry because interface unknown(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	Creation or update of a binding database failed because the connection port for a DHCP client is unknown. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] None.			
8	E3	DHCPSN	03100008	`DHCP server packets were received at an untrust port(<IF_NUMBER>/<VLAN ID>/<MAC_ADDRESS>/<IP_ADDRESS>).`
	An invalid DHCP server was detected. This message is output once every five minutes on a port-by-port basis. *<IF_NUMBER>*: Type and number of the interface that received the DHCP packets ● `Port = <IF#>`: Interface port number ● `ChGr = <Channel group#>`: Channel group number *<VLAN ID><MAC_ADDRESS>/<IP_ADDRESS>*: DHCP server information *<VLAN ID>*: VLAN ID *<MAC_ADDRESS>*: MAC address *<IP_ADDRESS>*: IP address [Action] Check the connected device.			
9	E3	DHCPSN	03100009	`Observed ARP flood, some packets shall be discarded (<IF_NUMBER>).`
	The number of received ARP packets exceeded the number of the reception rate set by using the `ip arp inspection limit rate` configuration command. *<IF_NUMBER>*: Type and number of the interface whose reception rate is exceeded ● `Port = <IF#>`: Interface port number ● `ChGr = <Channel group#>`: Channel group number [Action] None.			
10	E3	DHCPSN	0310000a	`ARP flood ebbed (<IF_NUMBER>).`
	The reception rate for ARP packets has not been exceeded for 30 seconds. (After this, if the reception rate is exceeded, the events for when the reception rate is exceeded are collected again.) *<IF_NUMBER>*: Type and number of the interface whose reception rate is exceeded ● `Port = <IF#>`: Interface port number ● `ChGr = <Channel group#>`: Channel group number [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
11	E3	DHCPSN	0310000b	`Observed DHCP flood, some packets shall be discarded (<IF_NUMBER>).`
	The number of received DHCP packets exceeded the number of the reception rate set by using the `ip dhcp snooping limit rate` configuration command. *<IF_NUMBER>*: Type and number of the interface whose reception rate is exceeded ● `Port = <IF#>`: Interface port number ● `ChGr = <Channel group#>`: Channel group number [Action] None.			
12	E3	DHCPSN	0310000c	`DHCP flood ebbed (<IF_NUMBER>).`
	The reception rate for DHCP packets has not been exceeded for 30 seconds. (After this, if the reception rate is exceeded, the events for when the reception rate is exceeded are collected again.) *<IF_NUMBER>*: Type and number of the interface whose reception rate is exceeded ● `Port = <IF#>`: Interface port number ● `ChGr = <Channel group#>`: Channel group number [Action] None.			
13	E3	DHCPSN	0310000d	`It failed to make binding entry exceeded(<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>).`
	Generation of the binding database failed because of insufficient database entries. *<MAC_ADDRESS>/<VLAN ID>/<IP_ADDRESS>*: DHCP client terminal information *<MAC_ADDRESS>*: MAC address *<VLAN ID>*: VLAN ID *<IP_ADDRESS>*: IP address [Action] The device capacity limit was exceeded. Review the system configuration.			
14	E3	DHCPSN	03100015	`It was not able to store binding database in <url>.[retry] (<reason>)`
	The binding database could not be saved to the specified storage destination. *<url>*: Specified storage destination ● `mc`: SD memory card `[`*retry*`]`: The number of retries *<reason>*: Reason for the failure ● `MC is not inserted.` (No memory card is inserted.) ● `Can't access to MC by write protection.` (The memory card is read-only.) ● `It is accessed MC by other processing.` (The memory card is being used by other processing.) ● `MC file is not writing`. (Writing to the file on the memory card is not possible.) A reason other than the above *<reason>* is information used for analysis by the vendor. [Action] Take appropriate action according to the indicated *<reason>*.			

No.	Event level	Event location	Message ID	Message text
	Description			
15	E3	DHCPSN	03100016	`It was not able to store binding database in <url>.[retry] (<reason>)`
	The binding database could not be saved to the specified storage destination. *<url>*: Specified storage destination ● `flash`: Internal flash memory `[`*retry*`]`: The number of retries *<reason>*: Reason for the failure ● `It is accessed Flash by other processing.` (Internal flash memory is being used by other processing.) A reason other than the above *<reason>* is information used for analysis by the vendor. [Action] Take appropriate action according to the indicated *<reason>*.			
16	E3	DHCPSN	03100017	`It succeeded in the restored of binding database from <url>.[retry]`
	The binding database was restored from the specified storage destination. *<url>*: Specified storage destination ● `flash`: Internal flash memory ● `mc`: SD memory card `[`*retry*`]`: The number of retries [Action] None.			
17	E3	DHCPSN	03100018	`It was not able to restore binding database from <url>.[retry] (<reason>)`
	The binding database could not be restored from the specified storage destination. *<url>*: Specified storage destination ● `flash`: Internal flash memory ● `mc`: SD memory card `[`*retry*`]`: The number of retries *<reason>*: Reason for the failure ● `MC is not inserted.` (No memory card is inserted.) ● `MC file is not found.` (Files were not found on the memory card.) ● `It is accessed MC by other processing.` (The memory card is being used by other processing.) ● `It is accessed Flash by other processing.` (Internal flash memory is being used by other processing.) ● `MC file is not reading.` (Reading from the file on the memory card is not possible.) ● `May be broken.` (The storage destination specified in the configuration might be corrupted.) ● `The data is not saved.` (There is no restorable data.) A reason other than the above *<reason>* is information used for analysis by the vendor. [Action] Take appropriate action according to the indicated *<reason>*.			

No.	Event level	Event location	Message ID	Message text
	Description			
18	E3	DHCPSN	03100019	`It succeeded in the restored of binding database from <url>.[retry](<reason>)`
	The binding database was restored from the specified storage destination. *<url>*: Specified storage destination ● `flash`: Internal flash memory ● `mc`: SD memory card `[`*retry*`]`: The number of retries *<reason>*: Reason ● `The number of the dynamic entries zero.` (The number of dynamic entries was zero.) [Action] None.			
19	E3	DHCPSN	0310001a	`It cannot store a binding database (<reason>).`
	The binding database could not be stored. *<reason>*: Reason for the failure ● `MC is not inserted.` (No memory card is inserted.) ● `Can't access to MC by write protection.` (The memory card is read-only.) [Action] Take appropriate action according to the indicated *<reason>*.			

2.3.10 Event location = IP

The following table describes device failure and event information when the event location is `IP`.

- E3 information

Table 2-25 Device-related E3 information when the event location is IP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	IP	00600001	`Duplicate IP address <ipv4 address> (VLAN<VLAN ID>) on <MAC address>.`
	A duplicate IPv4 address was detected on the VLAN *<VLAN ID>* interface. *<ipv4 address>*: IPv4 address whose duplication was detected `VLAN` *<VLAN ID>*: Interface number of the VLAN on which the duplicate IPv4 address was detected *<MAC address>*: MAC address of the remote switch with the duplicate IPv4 address (source MAC address during ARP payload) [Action] Change the IPv4 address of the VLAN interface for the Switch. Alternatively, change the duplicate IPv4 address of the remote switch.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E3	IP	00600002	`Duplicate IP address` *<ipv6 address>* `(VLAN`*<VLAN ID>*`) on` *<MAC address>*`.`
	A duplicate IPv6 address was detected on the VLAN *<VLAN ID>* interface. *<ipv6 address>*: IPv6 address whose duplication was detected `VLAN` *<VLAN ID>*: Interface number of the VLAN on which the duplicate IPv6 address was detected *<MAC address>*: MAC address of the remote switch with the duplicate IPv6 address (source MAC address during RA payload) [Action] Change the IPv6 address of the VLAN interface for the Switch. Alternatively, change the duplicate IPv6 address of the remote switch.			
3	E3	IP	00600010	`The number of pieces of the ARP entry exceeds the capacity of this system.`
	The number of entries in the ARP table exceeds the capacity limit of the Switch. [Action] Use the `show system` command to check that the current number of entries in the ARP table does not exceed the capacity limit. If the number is exceeding the capacity limit, perform the following: 1. Delete any unnecessary information in the arp configuration. 2. If unnecessary entries are dynamically generated, execute the `clear arp-cache` command to delete those entries. 3. Review the network system configuration, and change the configuration so that the system can reduce entry numbers from the ARP table.			
4	E3	IP	00600100	`The number of pieces of the NDP entry exceeds the capacity of this system.`
	The number of entries in the NDP table exceeds the capacity limit of the Switch. [Action] Use the `show system` command to check that the current number of entries in the NDP table is not exceeding the capacity limit. If the number is exceeding the capacity limit, perform the following: 1. Delete any unnecessary information in the ndp configuration. 2. If unnecessary entries are dynamically generated, execute the `clear ipv6 neighbors` command to delete those entries. 3. Review the network system configuration, and change the configuration so that the system can reduce entry numbers from the NDP table.			

2.3.11 Event location = SNMP

The following table describes device failure and event information when the event location is SNMP.

- E3 information

Table 2-26 Device-related E3 information when the event location is SNMP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	SNMP	01200001	`The engineID has not been recorded.`
	SNMP engine ID information has not been recorded in flash memory at startup for one of the following reasons: ● The time is just after production. ● The time is after the initial execution of the `ppupdate` command. ● The contents of the sector that contains the SNMP engine ID have been completely deleted. [Action] None.			
2	E3	SNMP	01200002	`The recorded engineID is damaged.`
	For either of the following reasons, the SNMP engine ID recorded in flash memory at startup or the number of startups after the SNMP engine ID was changed is invalid. ● The switch was restarted accidentally while SNMP engine ID information is being written to flash memory. ● Flash memory hardware is corrupted. [Action] Use the `set snmp-server engineID local` operation command to correct the SNMP engine ID and the number of startup attempts.			
3	E3	SNMP	01200003	`Flash memory driver error: xxxx.`
	An error was reported from the flash memory driver. The impact of the error might become obvious the next time the switch is restarted. *xxxx*: Information for vendor analysis [Action] Use the `reload` operation command to restart the switch. Check the log entry generated by the restart.			

2.4 Switch parts

2.4.1 Event location = KERNEL

The following table describes device failure and event information when the event location is KERNEL.

- E3 information

Table 2-27 Device-related E3 information when the event location is KERNEL

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	KERNEL	01f00004	Boot cause is system fault.
	An error occurred, and then the switch restarted. [Action] None.			
2	E3	KERNEL	01f00008	Boot cause is exception.
	An unexpected interruption occurred, and then the switch restarted. [Action] None.			
3	E3	KERNEL	01f00010	Boot cause is watchdog timeout.
	A hardware watchdog timeout occurred, and then the switch restarted. [Action] None.			
4	E3	KERNEL	01f00020	Boot cause is reset button.
	The switch restarted because the RESET button was pressed. [Action] None.			
5	E3	KERNEL	01f00040	Boot cause is expired sleep time.
	The switch restarted because the switch sleep period expired. [Action] None.			
6	E3	KERNEL	01f00042	Boot cause is expired sleep time.
	The switch restarted because the switch sleep period expired (with wakeup options). [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
7	E3	KERNEL	01f00060	`Boot cause is wake up from sleep by force.`
	The switch restarted because the switch's sleep state was forcibly released. [Action] None.			
8	E3	KERNEL	01f00062	`Boot cause is wake up from WoL.`
	The switch restarted because the switch's sleep state was released by the wakeup option (WoL detection). [Action] None.			
9	E3	KERNEL	01f00080	`Boot cause is sleep(wakeup-option).`
	The switch entered the sleep state (wakeup option mode). [Action] None.			
10	E3	KERNEL	01f00142	`Boot cause is wake up from linkup.`
	The switch restarted because the switch's sleep state was released by the wakeup option (link-up detection). [Action] None.			
11	E3	KERNEL	01f00242	`Boot cause is wake up from SFP insert.`
	The switch's sleep state was released because an SFP module was inserted, and the switch restarted. [Action] None.			
12	E3	KERNEL	01f00300	`System failure occurred repeating. Stop the system recovery.`
	The recovery process stopped because a system malfunction occurred repeatedly. [Action] None.			

2.4.2 Event location = NTP

The following table describes device failure and event information when the event location is NTP.

- E3 information

Table 2-28 Device-related E3 information when the event location is NTP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	NTP	01a72201	NTPC:Fixation time was not notified!
	The periodic monitoring report stopped because the periodic update time came during command execution. [Action] None.			
2	E3	NTP	01a72502	NTPC:Time was set up. (Difference in 5 sec or more!)
	The time was configured, but the time lag is five seconds or more. [Action] None.			

2.4.3 Event location = 802.1X

The following tables describe device failure and event information when the event location is 802.1X.

- E3 information

Table 2-29 Device-related E3 information when the event location is 802.1X

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	802.1X	00800011	There is a possibility that 802.1X(port) was not set in some interfaces.
	For some interfaces, 802.1X (port-based authentication) might not be configured. [Action] Delete settings for 802.1X by using the no command, and then reconfigure 802.1X.			
2	E3	802.1X	00800012	There is a possibility that 802.1X(port) was not unset in some interfaces.
	For some interfaces, 802.1X (port-based authentication) might not be released. [Action] Configure the settings by using commands again, and then delete settings for 802.1X by using the no command.			

- E9 information

Table 2-30 Device-related E9 information when the event location is 802.1X

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	802.1X	00820001 00820002 00820003 00820004 00820005 00820006 00820007 00820008 00820045	`Could not start L2-authentication function.`
	Layer 2 authentication functionality could not start when the switch started. [Action] None. The switch automatically restarts.			
2	E9	802.1X	00820011	`Could not start 802.1X Authenticator function.`
	The 802.1X functionality could not start. [Action] None. The switch automatically restarts.			
3	E9	802.1X	00820021 00820022 00820031 00820032 00820041 00820046 00820047	`Internal error occurred. (code=`*xx*`).`
	An internal processing error occurred. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.4.4 Event location = RADIUS

The following tables describe device failure and event information when the event location is RADIUS.

- E3 information

Table 2-31 Device-related E3 information when the event location is RADIUS

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	RADIUS	01000000	The authentication dead-interval timer start.
	The monitoring timer started according to the setting of the radius-server dead-interval configuration command because the secondary RADIUS server became the RADIUS authentication request destination because of the failure of the primary RADIUS server. [Action] None.			
2	E3	RADIUS	01000001	The accounting dead-interval timer start.
	The monitoring timer started according to the setting of the radius-server dead-interval configuration command because the secondary RADIUS server became the RADIUS accounting destination because of the failure of the primary RADIUS server. [Action] None.			
3	E3	RADIUS	01000002	The authentication dead-interval timer stop.
	The monitoring timer configured by using the radius-server dead-interval configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the radius-server dead-interval configuration command expired. ● The RADIUS authentication request destination changed from the secondary RADIUS server to the restored primary RADIUS server. [Action] None.			
4	E3	RADIUS	01000003	The accounting dead-interval timer stop.
	The monitoring timer configured by using the radius-server dead-interval configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the radius-server dead-interval configuration command expired. ● The RADIUS accounting destination changed from the secondary RADIUS server to the restored primary RADIUS server. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
5	E3	RADIUS	01000004	`The MAC authentication dead-interval timer start.`
	The monitoring timer started according to the setting of the `mac-authentication radius-server dead-interval` configuration command because the secondary RADIUS server for MAC authentication became the RADIUS authentication request destination because of the failure of the primary RADIUS server for MAC authentication. [Action] None.			
6	E3	RADIUS	01000005	`The MAC accounting dead-interval timer start.`
	The monitoring timer started according to the setting of the `mac-authentication radius-server dead-interval` configuration command because the secondary RADIUS server for MAC authentication became the RADIUS accounting destination because of the failure of the primary RADIUS server for MAC authentication. [Action] None.			
7	E3	RADIUS	01000006	`The MAC authentication dead-interval timer stop.`
	The monitoring timer configured by using the `mac-authentication radius-server dead-interval` configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the `mac-authentication radius-server dead-interval` configuration command expired. ● The RADIUS authentication request destination changed from the secondary RADIUS server for MAC authentication to the restored primary RADIUS server for MAC authentication. [Action] None.			
8	E3	RADIUS	01000007	`The MAC accounting dead-interval timer stop.`
	The monitoring timer configured by using the `mac-authentication radius-server dead-interval` configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the `mac-authentication radius-server dead-interval` configuration command expired. ● The RADIUS accounting destination changed from the secondary RADIUS server for MAC authentication to the restored primary RADIUS server for MAC authentication. [Action] None.			
9	E3	RADIUS	01000008	`The Web authentication dead-interval timer start.`
	The monitoring timer started according to the setting of the `web-authentication radius-server dead-interval` configuration command because the secondary RADIUS server for Web authentication became the RADIUS authentication request destination because of the failure of the primary RADIUS server for Web authentication. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
10	E3	RADIUS	01000009	`The Web accounting dead-interval timer start.`
	The monitoring timer started according to the setting of the `web-authentication radius-server dead-interval` configuration command because the secondary RADIUS server for Web authentication became the RADIUS accounting destination because of the failure of the primary RADIUS server for Web authentication. [Action] None.			
11	E3	RADIUS	0100000a	`The Web authentication dead-interval timer stop.`
	The monitoring timer configured by using the `web-authentication radius-server dead-interval` configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the `web-authentication radius-server dead-interval` configuration command expired. ● The RADIUS authentication request destination changed from the secondary RADIUS server for Web authentication to the restored primary RADIUS server for Web authentication. [Action] None.			
12	E3	RADIUS	0100000b	`The Web accounting dead-interval timer stop.`
	The monitoring timer configured by using the `web-authentication radius-server dead-interval` configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the `web-authentication radius-server dead-interval` configuration command expired. ● The RADIUS accounting destination changed from the secondary RADIUS server for Web authentication to the restored primary RADIUS server for Web authentication. [Action] None.			
13	E3	RADIUS	0100000c	`The 802.1X authentication dead-interval timer start.`
	The monitoring timer started according to the setting of the `dot1x radius-server dead-interval` configuration command because the secondary RADIUS server for IEEE 802.1X authentication became the RADIUS authentication request destination because of the failure of the primary RADIUS server for IEEE 802.1X authentication. [Action] None.			
14	E3	RADIUS	0100000d	`The 802.1X accounting dead-interval timer start.`
	The monitoring timer started according to the setting of the `dot1x radius-server dead-interval` configuration command because the secondary RADIUS server for IEEE 802.1X authentication became the RADIUS accounting destination because of the failure of the primary RADIUS server for IEEE 802.1X authentication. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
15	E3	RADIUS	0100000e	`The 802.1X authentication dead-interval timer stop.`
	The monitoring timer configured by using the `dot1x radius-server dead-interval` configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the `dot1x radius-server dead-interval` configuration command expired. ● The RADIUS authentication request destination changed from the secondary RADIUS server for IEEE 802.1X authentication to the restored primary RADIUS server for IEEE 802.1X authentication. [Action] None.			
16	E3	RADIUS	0100000f	`The 802.1X accounting dead-interval timer stop.`
	The monitoring timer configured by using the `dot1x radius-server dead-interval` configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the `dot1x radius-server dead-interval` configuration command expired. ● The RADIUS accounting destination changed from the secondary RADIUS server for IEEE 802.1X authentication to the restored primary RADIUS server for IEEE 802.1X authentication. [Action] None.			
17	E3	RADIUS	01000010	`The Group[x] authentication dead-interval timer start.`
	The monitoring timer started according to the setting of the `radius-server dead-interval` configuration command because the secondary RADIUS server in RADIUS server group *x* became the RADIUS authentication request destination because of the failure of the primary RADIUS server in the same group. *x*: RADIUS server group name [Action] None.			
18	E3	RADIUS	01000012	`The Group[x] authentication dead-interval timer stop.`
	The monitoring timer configured by using the `radius-server dead-interval` configuration command stopped for one of the following reasons: ● The monitoring timer configured by using the `radius-server dead-interval` configuration command expired. ● The RADIUS authentication request destination changed from the secondary RADIUS server in RADIUS server group *x* to the restored primary RADIUS server in the same group. *x*: RADIUS server group name [Action] None.			

- E9 information

Table 2-32 Device-related E9 information when the event location is RADIUS

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	RADIUS	01020012	`Could not start RADIUS Client function.`
	The RADIUS client functionality could not start. [Action] None. The switch automatically restarts.			
2	E9	RADIUS	01020013	`RADIUS Queue Overflow.`
	A response queue error occurred in a RADIUS client. [Action] None. The switch automatically restarts.			

2.4.5 Event location = CERTIF

The following table describes device failure and event information when the event location is `CERTIF`.

- E9 information

Table 2-33 Device-related E9 information when the event location is CERTIF

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	CERTIF	00f01006	`Could not start MAC Authentication function. (Code=`*xx*`)`
	The MAC authentication functionality could not start. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			
2	E9	CERTIF	00f01011	`Internal error occurred. (Code=`*xx* `SubCode=`*xx*`)`
	When using the MAC authentication functionality, an internal error occurred. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			

No.	Event level	Event location	Message ID	Message text
	Description			
3	E9	CERTIF	00f01014	`Failed to <xxxx> driver's filter. (Code=x, ethernet <IF#>)`
	When using the MAC authentication functionality, the driver filter control failed. <*xxxx*>: `set` or `unset` *x*: Cause code (information for vendor analysis) <*IF#*>: Interface port number [Action] None. The switch automatically restarts.			
4	E9	CERTIF	00f01021	`Failed to control timer function. (Code=xx SubCode=xx)`
	When using the MAC authentication functionality, the timer functionality control failed. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			
5	E9	CERTIF	00f02006	`Could not start Web Authentication function. (Code=xx)`
	The Web authentication functionality could not start. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			
6	E9	CERTIF	00f02011	`Internal error occurred. (Code=xx SubCode=xx)`
	When using the Web authentication functionality, an internal error occurred. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			
7	E9	CERTIF	00f02021	`Failed to control timer function. (Code=xx SubCode=xx)`
	When using the Web authentication functionality, the timer functionality control failed. *xx*: Cause code (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.4.6 Event location = HTTPD

The following table describes device failure and event information when the event location is `HTTPD`.

- E3 information

Table 2-34 Device-related E3 information when the event location is HTTPD

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	HTTPD	03200001	`HTTP server initialization failed.`
	The HTTP server failed to be initialized. [Action] The SSL certificate and private key are incorrect. Obtain the correct SSL certificate and private key, and then re-install them on the switch.			

2.4.7 Event location = QOS

The following tables describe device failure and event information when the event location is `QOS`.

- E3 information

Table 2-35 Device-related E3 information when the event location is QOS

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	QOS	00930000	`Unable to use traffic-shape rate feature because value exceeding setting range was specified.`
	Port bandwidth control is not available because a value outside the valid setting range (usable line speed) was specified. [Action] Change the bandwidth to a value inside the setting range. For details about the valid setting range, see the descriptions of the `rate` parameter under *Traffic-shape rate* in the manual *Configuration Command Reference*.			
2	E3	QOS	00930002	`Port half duplex does not support traffic-shape rate feature.`
	Port bandwidth control is not available for half-duplex lines. [Action] Do either of the following: 1. If port bandwidth control is to be used, switch to a full-duplex line. 2. If a half-duplex line is to be used, delete port bandwidth control by using the configuration command `no traffic-shape rate`.			

No.	Event level	Event location	Message ID	Message text
	Description			
3	E3	QOS	00930005	`Unable to use WFQ feature because total value of minimum rate exceeding the maximum rate of the port.`
	Scheduling modes that include WFQ are not available because the total value of the minimum guaranteed bandwidths (`min-rate`) exceeds the maximum send bandwidth. [Action] Use the `qos-queue-list` configuration command to adjust the total value of the minimum guaranteed bandwidths so that the total is equal to or lower than the maximum send bandwidth.			
4	E3	QOS	00930006	`Port half duplex does not support WFQ feature.`
	The scheduling mode that includes WFQ is not available for half-duplex lines. [Action] Do either of the following: 1. If WFQ is to be used in the scheduling mode, switch to a full-duplex line. 2. If a half-duplex line is to be used, switch to a scheduling mode that does not include WFQ by using the `qos-queue-group` and `qos-queue-list` configuration commands.			
5	E3	QOS	00930007	`Relations between traffic-shape rate and scheduling mode are inconsistent.`
	The port bandwidth control settings do not match the scheduling mode settings. The specifiable scheduling mode for using port bandwidth control is PQ. [Action] Do either of the following: 1. To use port bandwidth control, change the scheduling mode to PQ by using the `qos-queue-group` and `qos-queue-list` configuration commands. 2. To use a scheduling mode other than PQ, delete the port bandwidth control setting by using the `no traffic-shape rate` configuration command.			

- E9 information

Table 2-36 Device-related E9 information when the event location is QOS

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	QOS	00900000	`Swd Configuration Error. <comment>`
	The QoS configuration could not be set for the hardware controller. <*comment*>: Cause information (information for vendor analysis) [Action] None. The switch automatically restarts.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E9	QOS	00900001	`Software error.`
	Software error (semaphore ID error) ● Creation of the semaphore ID failed during initialization at the switch startup. ● Acquisition of the semaphore ID failed when creating the switch operation configurations. [Action] None. The switch automatically restarts.			
3	E9	QOS	00900010 00900011	`Internal error occurred. (code=`*xxxx*`,`*xxxx*`)`
	The QoS configuration could not be set for the hardware controller. ● `00900010` : For legacy shaping ● `00900011` : For port shaping *xxxx* = error code: Information for vendor analysis [Action] None. The switch automatically restarts.			

2.4.8 Event location = FIELD

The following table describes device failure and event information when the event location is `FIELD`.

- E9 information

Table 2-37 Device-related E9 information when the event location is FIELD

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	FIELD	00c00000	`Swd Configuration Error. <`*comment*`>`
	The configuration of a filter could not be set for the hardware controller. *<comment>*: Cause information (information for vendor analysis) [Action] None. The switch automatically restarts.			

2.4.9 Event location = SWOL

The following table describes device failure and event information when the event location is SWOL.

- E3 information

Table 2-38 Device-related E3 information when the event location is SWOL

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	SWOL	03700000	Login incorrect [User reject] USER=*xxxx*
	User authentication for Secure Wake-on-LAN failed because of an invalid user name or password. USER=*xxxx*: User name [Action] None.			
2	E3	SWOL	03700001	Login incorrect [Server busy] USER=*xxxx*
	User authentication for Secure Wake-on-LAN failed because the user management area does not have sufficient capacity. USER=*xxxx*: User name [Action] Wait a while, and then retry the operation.			
3	E3	SWOL	03700002	Device not found DEVICENAME=*xxxx*
	The terminal selected by a request is not registered in the database. DEVICENAME=*xxxx*: Terminal name [Action] None.			
4	E3	SWOL	03700003	User entry expired USER=*xxxx*
	A user entry shifted to the expiration phase because a user timed out during user authentication for Secure Wake-on-LAN. USER=*xxxx*: User name [Action] None.			
5	E3	SWOL	03700004	Magic packet processing was completed USER=*xxxx* MAC=*xxxx.xxxx.xxxx*
	Start command sending succeeded. USER=*xxxx*: User name MAC=*xxxx.xxxx.xxxx*: Terminal MAC address [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
6	E3	SWOL	03700005	`Configuration of DHCP snooping is no set`
	The DHCP snooping configuration is not set. [Action] To monitor the status of terminals to which DHCP assigns IP addresses, set the DHCP snooping configuration.			

2.4.10 Event location = ECO

The following tables describe device failure and event information when the event location is `ECO`.

- E3 information

Table 2-39 Device-related E3 information when the event location is ECO

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	ECO	03b00101	`System changes to the schedule power control because it became schedule time.`
	The scheduled time for power saving has been reached. [Action] None.			
2	E3	ECO	03b00102	`System changes from the schedule power control because it ended schedule time.`
	The scheduled time for power saving has ended. [Action] None.			
3	E3	ECO	03b00200	`This machine is going to sleep ... in a few seconds.`
	The switch will enter the sleep state in a few seconds. [Action] None.			

- E8 information

Table 2-40 Device-related E8 information when the event location is ECO

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	ECO	03bfa001	Detect Uncorrectable Error (MII Interface)
	An error was detected on the MIIM interface of the Ethernet interface embedded in the CPU while the switch was in the sleep state. [Action] Replace the switch.			
2	E8	ECO	03bfa002	Detect Uncorrectable Error (Ethernet Interface)
	An error was detected on the internal Ethernet interface embedded in the CPU while the switch was in the sleep state. [Action] Replace the switch.			
3	E8	ECO	03bfa003	Detect Uncorrectable Error (cannot turn off the SW LSI)
	The power of a switch device could not be turned off when the switch transitioned to the sleep state. [Action] Replace the switch.			
4	E8	ECO	03bfa004	Detect Uncorrectable Error (MIIM connectivity)
	The connection between a switch device and PHY (MIIM) could not be disabled when the switch transitioned to the sleep state. [Action] Replace the switch.			
5	E8	ECO	03bfa005	Detect Uncorrectable Error (MIIM connectivity)
	The connection between a switch device and PHY (MIIM) could not be enabled when the switch transitioned to the sleep state. [Action] Replace the switch.			
6	E8	ECO	03bfa006	Detect Uncorrectable Error (SGMII connectivity)
	The connection between the CPU and PHY (SGMII) could not be enabled when the switch transitioned to the sleep state. [Action] Replace the switch.			

2.4.11 Event location = SML

The following table describes device failure and event information when the event location is `SML`.

- E3 information

Table 2-41 Device-related E3 information when the event location is SML

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	SML	04000000	`Status is Standalone.`
	The SML status changed to the `Standalone` status. [Action] Make sure the peer link is in the link-up state.			
2	E3	SML	04000001	`Status is Full.`
	The SML status changed to the `Full` status. [Action] None.			
3	E3	SML	04000002	`Status is Conflict.`
	The SML status changed to the `Conflict` status. [Action] Review the SML ID setting (`system sml id`).			
4	E3	SML	04000003	`Cleared MAC Address Table entry in the SML domain.`
	A MAC address table entry in the same SML domain was cleared. [Action] None.			

- E4 information

Table 2-42 Device-related E4 information when the event location is SML

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	SML	04000004	`Peer-link is normal.`
	All ports specified in a peer link are up. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E4	SML	04000005	`Failure of some peer-link.`
	Some of the ports specified in a peer link are down. [Action] Check the line status.			
3	E4	SML	04000006	`Recovery of some peer-link.`
	Some of the ports specified in a peer link are up. [Action] None.			
4	E4	SML	04000007	`Peer-link disconnected.`
	All ports specified in a peer link are down. [Action] Check the line status.			

2.5 Port

2.5.1 Event location = PORT

The following tables describe device failure and event information when the event location is PORT.

- E3 information

Table 2-43 Device-related E3 information when the event location is PORT

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	PORT	01e0000b	Port enabled administratively.
	A port is enabled. <*IF#*>: Interface port number [Action] None.			
2	E3	PORT	01e0000b	Port disabled administratively.
	A port is disabled. <*IF#*>: Interface port number [Action] None.			
3	E3	PORT	01e00200	Port activated administratively.
	A port was specified to be active. <*IF#*>: Interface port number [Action] None.			
4	E3	PORT	01e00201	Port inactivated administratively.
	A port was specified to be inactive. <*IF#*>: Interface port number [Action] None.			

- E4 information

Table 2-44 Device-related E4 information when the event location is PORT

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	PORT	01e01103	`Auto negotiation failed.`
	Auto-negotiation has failed. [Action] ● Check the auto-negotiation settings. ● Execute the `test interfaces` operation command, and make sure that the cables have no problem. ● If the devices and the cables are normal, check the connected devices.			
2	E4	PORT	01e3*x*001	`Port Up.`
	The port is up. *x*: 2 (GigabitEthernet), 4 (TenGigabitEthernet) [Action] None.			
3	E4	PORT	01e3*x*002	`Error detected on the port.`
	Errors were detected at the ports. *x*: 2 (GigabitEthernet), 4 (TenGigabitEthernet) [Action] For 10BASE-T, 100BASE-TX, or 1000BASE-T: 1. Make sure that the specified cables are properly connected. 2. Make sure that the remote switch has finished starting up. 3. Execute the `test interfaces` operation command, and make sure that the switches and cables have no problem.			
4	E4	PORT	01e40001	`NIF <nif no.> Port <port no.>:inactivated because of broadcast storm detection.`
	A port was deactivated because a broadcast storm was detected. `NIF <nif no.> Port <port no.>`: Interface port number [Action] After recovering from the storm, use the `activate` operation command to change the port status to active.			
5	E4	PORT	01e40002	`NIF <nif no.> Port <port no.>:broadcast storm detected.`
	A broadcast storm was detected. `NIF <nif no.> Port <port no.>`: Interface port number [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
6	E4	PORT	01e40003	NIF <*nif no.*> Port <*port no.*>:broadcast storm recovered.
	The system has recovered from a broadcast storm. NIF <*nif no.*> Port <*port no.*>: Interface port number [Action] None.			
7	E4	PORT	01e40004	NIF <*nif no.*> Port <*port no.*>:inactivated because of multicast storm detection.
	A port was deactivated because a multicast storm was detected. NIF <*nif no.*> Port <*port no.*>: Interface port number [Action] After recovering from the storm, use the activate operation command to change the port status to active.			
8	E4	PORT	01e40005	NIF <*nif no.*> Port <*port no.*>:multicast storm detected.
	A multicast storm was detected. NIF <*nif no.*> Port <*port no.*>: Interface port number [Action] None.			
9	E4	PORT	01e40006	NIF <*nif no.*> Port <*port no.*>:multicast storm recovered.
	The system has recovered from a multicast storm. NIF <*nif no.*> Port <*port no.*>: Interface port number [Action] None.			
10	E4	PORT	01e40007	NIF <*nif no.*> Port <*port no.*>:inactivated because of unicast storm detection.
	A port was deactivated because a unicast storm was detected. NIF <*nif no.*> Port <*port no.*>: Interface port number [Action] After recovering from the storm, use the activate operation command to change the port status to active.			
11	E4	PORT	01e40008	NIF <*nif no.*> Port <*port no.*>:unicast storm detected.
	A unicast storm was detected. NIF <*nif no.*> Port <*port no.*>: Interface port number [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
12	E4	PORT	01e40009	`NIF <nif no.> Port <port no.>:unicast storm recovered.`
	The system has recovered from a unicast storm. `NIF <nif no.> Port <port no.>`: Interface port number [Action] None.			
13	E4	PORT	01e50001	`NIF <nif no.> Port <port no.>:inactivated because of uni-directional link detection.`
	A port was deactivated because a unidirectional link failure was detected. `NIF <nif no.> Port <port no.>`: Interface port number [Action] ● Make sure that the IEEE 802.3ah/OAM functionality is valid at the connection destination. ● Execute the `test interfaces` command, and make sure that the switches and cables have no errors. ● If the devices and the cables are normal, check the connected devices. After the above, activate the port by using the `activate` command.			

- R8 information

Table 2-45 Device-related R8 information when the event location is PORT

No.	Event level	Event location	Message ID	Message text
	Description			
1	R8	PORT	01ef01*xx* 01ef02*xx*	`<IF#> PORT setting recovered by SFP change.`
	The switch recovered from the port setting failure after the SFP module was changed. *xx*: Port number (hexadecimal) *<IF#>*: Interface port number [Action] None.			

- E8 information

Table 2-46 Device-related E8 information when the event location is PORT

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	PORT	01e23001	*<xxxxxxxx>* : Failed SFP *xx* Tx Disable.
	SFP transmission control failed. *<xxxxxxxx>*: Detection location (information for vendor analysis) *xx* = Specific SFP port number [24T] [24T4X] [24TD] 0 to 3: 0/25 to 0/28 [48T] [48T2X] [48TD] 0 to 3: 0/49 to 0/52 [24S4X] [24S4XD] 0 to 27: 0/1 to 0/28 [Action] Use the `reload` operation command to restart the switch.			
2	E8	PORT	01e23002	*<xxxxxxxx>* : Failed SFP *xx* Tx Enable.
	SFP transmission control failed. *<xxxxxxxx>*: Detection location (information for vendor analysis) *xx* = Specific SFP port number [24T] [24T4X] [24TD] 0 to 3: 0/25 to 0/28 [48T] [48T2X] [48TD] 0 to 3: 0/49 to 0/52 [24S4X] [24S4XD] 0 to 27: 0/1 to 0/28 [Action] Use the `reload` operation command to restart the switch.			
3	E8	PORT	01e31000	Failed Pause MAC Address setting. (*<IF#>*)
	An attempt to set a MAC address for Pause failed. *<IF#>*: Interface port number [Action] Use the `reload` operation command to restart the switch.			
4	E8	PORT	01ef01*xx*	*<IF#>* PORT setting failed by SFP change.[Code=*<Code>*]
	An attempt to set the port failed when an SFP module was being replaced. *xx*: Port number (hexadecimal) *<IF#>*: Interface port number *<Code>*: Cause code (information for vendor analysis) [Action] Remove and then insert the SFP module again. If the system has recovered from the failure, operations can resume. If the recovery failed, switch to an unused port. To use the failed port again, replace the device.			

No.	Event level	Event location	Message ID	Message text
	Description			
5	E8	PORT	01ef02*xx*	`<IF#> PORT setting failed by SFP change.[ Code=<Code> ]`
	An attempt to set the port failed when an SFP module was being replaced. *xx*: Port number (hexadecimal) *<IF#>*: Interface port number *<Code>*: Cause code (information for vendor analysis) [Action] Re-execute the line test command. If the system has recovered from the failure, operations can resume. If the recovery failed, switch to an unused port. To use the failed port again, replace the device.			

- E9 information

Table 2-47 Device-related E9 information when the event location is PORT

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	PORT	01e00001	`<IF#> speed setting failed.`
	An attempt to set the speed failed. *<IF#>*: Interface port number [Action] Retry the operation.			
2	E9	PORT	01e00002	`<IF#> duplex setting failed.`
	An attempt to set the duplex failed. *<IF#>*: Interface port number [Action] Retry the operation.			
3	E9	PORT	01e00003	`<IF#> flowcontrol setting failed.`
	An attempt to set the flow control failed. *<IF#>*: Interface port number [Action] Retry the operation.			
4	E9	PORT	01e0000C	`<IF#> mdix setting failed.`
	An attempt to set MDIX failed. *<IF#>*: Interface port number [Action] Retry the operation.			

No.	Event level	Event location	Message ID	Message text
	Description			
5	E9	PORT	01e00004	`Failed Interface MTU setting.`
	An attempt to set the MTU specified in the interface failed. [Action] Retry the operation.			
6	E9	PORT	01e00009	`Failed System MTU setting.`
	An attempt to set the system MTU failed. [Action] Retry the operation.			
7	E9	PORT	01e12100	`PLM : Config setting Error.`
	An attempt to set the port failed. [Action] Retry the operation.			
8	E9	PORT	01e3231b	`<`*xxxxxxxx*`> Message Queue Receive Error. Errno:`*xxxx*
	An error occurred when receiving a message between tasks. *<xxxxxxxx>*: Detection location (information for vendor analysis) *xxxx*: Cause code (information for vendor analysis) [Action] Use the `reload` operation command to restart the switch.			
9	E9	PORT	01e3231c	`<`*xxxxxxxx*`> Message Queue Send Error. Errno:`*xxxx*
	An error occurred when sending a message between tasks. *<xxxxxxxx>*: Detection location (information for vendor analysis) *xxxx*: Cause code (information for vendor analysis) [Action] Use the `reload` operation command to restart the switch.			
10	E9	PORT	01e30200	`<`*xxxxxxxx*`> Failed Register a handler.` `<`*xxxxxxxx*`> Failed Register a handler (Linkdeb).`
	An attempt to register the notification functionality failed. *<xxxxxxxx>*: Detection location (information for vendor analysis) [Action] Use the `reload` operation command to restart the switch.			
11	E9	PORT	01e*x*5000	`<`*xxxxxxxx*`> WDT Time Out.`
	A watchdog timeout occurred while a port was being controlled. *<xxxxxxxx>*: Detection location (information for vendor analysis) *x*: "1"-PLM, "2"-MTCM, "3"-LCM/LINKDeb [Action] None. The switch automatically restarts.			

No.	Event level	Event location	Message ID	Message text
	Description			
12	E9	PORT	01e*x*5001	<*xxxxxxxx*> WDT Time Out.
	A watchdog timeout occurred while a port was being controlled. <*xxxxxxxx*>: Detection location (information for vendor analysis) *x*: ACT [Action] None. The switch automatically restarts.			

2.5.2 Event location = SFP

The following tables describe device failure and event information when the event location is SFP.

- E4 information

Table 2-48 Device-related E4 information when the event location is SFP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	SFP	024000*x*0	Transceiver connected.
	A transceiver insertion was detected. *x*: "0"-SFP, "1"-SFP+ [Action] None.			
2	E4	SFP	02400001	Transceiver not connected.
	An SFP module was removed from a port. [Action] None.			
3	E4	SFP	024000*x*2	Transceiver not supported.
	An SFP module [Unknown] is inserted in the port. *x*: "0"-SFP, "1"-SFP+ [Action] Make sure that the SFP module is valid, and then insert it again. The valid SFP module might not be recognized because of a loose connection. In this case, re-insert it.			

- R8 information

Table 2-49 Device-related R8 information when the event location is SFP

No.	Event level	Event location	Message ID	Message text
	Description			
1	R8	SFP	02400201	`Port recovered from hardware failure.`
	A port has recovered from a hardware failure. [Action] None.			
2	R8	SFP	02400401	`System recovered from port failure.`
	All ports have recovered from the failure. [Action] None.			
3	R8	SFP	024006*xx*	`SFP-T access recovered.`
	The port has recovered from an error in the SFP-T transceiver inserted into the port. *xx*: Port number (hexadecimal) [Action] None.			

- E8 information

Table 2-50 Device-related E8 information when the event location is SFP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	SFP	02400201	`Port restarted because of its hardware failure.`
	A port was restarted because a hardware failure occurred at the port. [Action] Check subsequent fault recovery log entries or fault recovery failure log entries. If the system has recovered from the failure, operations can resume. If the recovery failed, switch to an unused port. To use the failed port again, replace the device. If a transceiver is implemented, make sure that it is firmly installed.			
2	E8	SFP	02400401	`Port restarted, but not recovered from hardware failure.`
	A port restarted, but the port has not recovered from a hardware failure. [Action] Switch to an unused port. To use the failed port again, replace the device. If a transceiver is implemented, make sure that it is firmly installed.			

No.	Event level	Event location	Message ID	Message text
	Description			
3	E8	SFP	024006*xx*	`SFP-T access error.`
	An error occurred in the SFP-T inserted into the port. *xx*: Port number (hexadecimal) [Action] Make sure that the SFP module is valid, and then insert it again. The valid SFP module might not be recognized because of a loose connection. In this case, re-insert it.			

2.5.3 Event location = FABRIC

The following tables describe device failure and event information when the event location is `FABRIC`.

- E3 information

Table 2-51 Device-related E3 information when the event location is FABRIC

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	FABRIC	01d00001	`b-driver: Switch Device driver succeeded in memory restoration.(<type>)`
	Recovery from a parity error succeeded. *<type>*: `L2_ENTRY`, `L2MC` [Action] None.			

- E4 information

Table 2-52 Device-related E4 information when the event location is FABRIC

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	FABRIC	01d100*xx*	`Switch Device driver detected a fault.[<code>]`
	A recovery process was performed because a failure was detected in the device driver. *xx*: Port number (hexadecimal) *<code>*: Error code (information for vendor analysis) [Action] Check the following if the failure is detected repeatedly. ● Execute the `test interfaces` operation command, and make sure that the device or the cables have no problem. ● If the devices and the cables are normal, check the connected devices.			

- E8 information

Table 2-53 Device-related E8 information when the event location is FABRIC

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	FABRIC	01d00000	`Switch Device Configuration Unmatch`
	The device type definition does not match the number of recognized devices. [Action] Use the `reload` operation command to restart the device.			
2	E8	FABRIC	01df0000	`Switch Device Driver Startup Sequence Failure`.
	An attempt to start the device driver failed. [Action] Use the `reload` operation command to restart the device.			
3	E8	FABRIC	01d90000	`Failed to set STG <`*STG#*`> (rv=`*xx*`)`
	Configuration for the hardware failed. *<STG#>*: Information for vendor analysis *xx*: Information for vendor analysis [Action] Restart the Switch by executing the `reload` operation command, or by turning it off and then on.			
4	E8	FABRIC	01dxxxxx	`b-driver:` *xxxx*
	An error was detected in the device driver. *xxxx* = Error message: Information for vendor analysis [Action] Replace the device.			

- E9 information

Table 2-54 Device-related E9 information when the event location is FABRIC

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	FABRIC	01d00000	`Switch Device Configuration Unmatch`
	The device type definition does not match the number of recognized devices. [Action] None. The device automatically restarts.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E9	FABRIC	01d00001	`Switch Device Driver Error (returned by BCMX attach x:...)`
	The API cannot be controlled because an error occurred during processing to attach the device driver. [Action] None. The device automatically restarts.			
3	E9	FABRIC	01d00002	`Switch Device Driver Startup Sequence Failure`
	The device driver failed to start. [Action] None. The device automatically restarts.			
4	E9	FABRIC	01d00003	`Switch Device Driver Startup Sequence Time-Out`
	A timeout occurred during device driver startup. [Action] None. The device automatically restarts.			
5	E9	FABRIC	01d00004	`b-driver: Switch Device driver detected a fault.(<type>) <code>`
	A failure was detected when the threshold was exceeded. <type>: "L2_ENTRY", "L2MC", "ECC", "COMMON" <code>: Error code (information for vendor analysis) [Action] None. The device automatically restarts.			
6	E9	FABRIC	01d00005	`b-driver: Parity error occurred.(<type>)`
	A parity error was detected. (Excluding L2_ENTRY, L2MC, and CELLCRCERROR) <type>: "ECC", "COMMON" [Action] None. The device automatically restarts.			
7	E9	FABRIC	01d00006	`b-driver: Switch Device driver failed in memory restoration.(<type>)<code>`
	Recovery from the parity error failed. <type>: `L2_ENTRY` <code>: Error code (information for vendor analysis) [Action] None. The device automatically restarts.			
8	E9	FABRIC	01dxxxxx	`b-driver: xxxx`
	An error was detected in the device driver. *xxxx* = Error message: Information for vendor analysis [Action] None. The device automatically restarts.			

2.5.4 Event location = ULR

The following table describes device failure and event information when the event location is ULR.

- E4 information

Table 2-55 Device-related E4 information when the event location is ULR

No.	Event level	Event location	Message ID	Message text
	Description			
1	E4	ULR	03800000	`Change to secondary Port <IF#> from primary Port <IF#>.`
	The active port was switched to the secondary port because a link failure occurred in the primary port. <IF#>: Interface port number [Action] Check the failure in the primary port.			
2	E4	ULR	03800001	`Change to primary Port <IF#> from secondary Port <IF#>.`
	The active port was switched to the primary port because a link failure occurred in the secondary port. <IF#>: Interface port number [Action] Check the failure in the secondary port.			
3	E4	ULR	03800002	`Change to secondary Port <IF#> from primary ChGr <Channel group#>.`
	The active port was switched to the secondary port because a link failure occurred in the primary port. <IF#>: Interface port number <Channel group#>: Channel group number [Action] Check the failure in the primary port.			
4	E4	ULR	03800003	`Change to primary Port <IF#> from secondary ChGr <Channel group#>.`
	The active port was switched to the primary port because a link failure occurred in the secondary port. <IF#>: Interface port number <Channel group#>: Channel group number [Action] Check the failure in the secondary port.			

No.	Event level	Event location	Message ID	Message text
	Description			
5	E4	ULR	03800004	`Change to secondary ChGr <Channel group#> from primary Port <IF#>.`
	The active port was switched to the secondary port because a link failure occurred in the primary port. <*Channel group#*>: Channel group number <*IF#*>: Interface port number [Action] Check the failure in the primary port.			
6	E4	ULR	03800005	`Change to primary ChGr <Channel group#> from secondary Port <IF#>.`
	The active port was switched to the primary port because a link failure occurred in the secondary port. <*Channel group#*>: Channel group number <*IF#*>: Interface port number [Action] Check the failure in the secondary port.			
7	E4	ULR	03800006	`Change to secondary ChGr <Channel group#> from primary ChGr <Channel group#>.`
	The active port was switched to the secondary port because a link failure occurred in the primary port. <*Channel group#*>: Channel group number [Action] Check the failure in the primary port.			
8	E4	ULR	03800007	`Change to primary ChGr <Channel group#> from secondary ChGr <Channel group#>.`
	The active port was switched to the primary port because a link failure occurred in the secondary port. <*Channel group#*>: Channel group number [Action] Check the failure in the secondary port.			
9	E4	ULR	03800008	`Change to secondary Port <IF#> from primary Port <IF#> forced.`
	Manual switching from the primary port to the secondary port was executed. <*IF#*>: Interface port number [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
10	E4	ULR	03800009	`Change to primary Port <IF#> from secondary Port <IF#> forced.`
	Manual switching from the secondary port to the primary port was executed. <IF#>: Interface port number [Action] None.			
11	E4	ULR	0380000a	`Change to secondary Port <IF#> from primary ChGr <Channel group#> forced.`
	Manual switching from the primary port to the secondary port was executed. <IF#>: Interface port number <Channel group#>: Channel group number [Action] None.			
12	E4	ULR	0380000b	`Change to primary Port <IF#> from secondary ChGr <Channel group#> forced.`
	Manual switching from the secondary port to the primary port was executed. <IF#>: Interface port number <Channel group#>: Channel group number [Action] None.			
13	E4	ULR	0380000c	`Change to secondary ChGr <Channel group#> from primary Port <IF#> forced.`
	Manual switching from the primary port to the secondary port was executed. <Channel group#>: Channel group number <IF#>: Interface port number [Action] None.			
14	E4	ULR	0380000d	`Change to primary ChGr <Channel group#> from secondary Port <IF#> forced.`
	Manual switching from the secondary port to the primary port was executed. <Channel group#>: Channel group number <IF#>: Interface port number [Action] None.			
15	E4	ULR	0380000e	`Change to secondary ChGr <Channel group#> from primary ChGr <Channel group#> forced.`
	Manual switching from the primary port to the secondary port was executed. <Channel group#>: Channel group number [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
16	E4	ULR	0380000f	`Change to primary ChGr <Channel group#> from secondary ChGr <Channel group#> forced.`
	Manual switching from the secondary port to the primary port was executed. <*Channel group#*>: Channel group number [Action] None.			
17	E4	ULR	03800010	`Mac-address-table update frame cannot be sent on the Port <IF#> because capacity was exceeded.`
	A MAC address update frame cannot be sent because the number of MAC addresses which were sent exceeds the maximum (1024). <*IF#*>: Interface port number [Action] None.			
18	E4	ULR	03800011	`Mac-address-table update frame cannot be sent on the ChGr <Channel group#> because capacity was exceeded.`
	A MAC address update frame cannot be sent because the number of MAC addresses which were sent exceeds the maximum (1024). <*Channel group#*>: Channel group number [Action] None.			
19	E4	ULR	03840000	`Cleared MAC Address Table entry.`
	The MAC address table was cleared because a flush control frame was received. [Action] None.			

2.6 Device

2.6.1 Event location = ROM

The following tables describe device failure and event information when the event location is ROM.

- E3 information

Table 2-56 Device-related E3 information when the event location is ROM

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	ROM	02900000	FROM write timeout Addr=*xxxxxxxx*, getData=*xx*
	An error occurred in an attempt to write to flash memory. Addr=*xxxxxxxx*, getData=*xx*: Detection location (information for vendor analysis) [Action] Re-execute the command.			
2	E3	ROM	02900000	FROM erase timeout Addr=*xxxxxxxx*
	An error occurred in an attempt to erase the flash memory. Addr=*xxxxxxxx*: Detection location (information for vendor analysis) [Action] Re-execute the command.			
3	E3	ROM	02900001	flash format complete.
	Initialization of the flash memory file system succeeded. (This information is collected even if the format flash operation command succeeds.) [Action] None.			
4	E3	ROM	02900002	flash format error. detail=*xxxx*
	Initialization of the flash memory file system failed. detail=*xxxx*: Cause code (information for vendor analysis) [Action] Re-execute the format flash operation command. If this message is still collected, the flash memory might be corrupted.			
5	E3	ROM	02900003	flash format task not ended. detail=*xxxx*
	Initialization of the flash memory file system was not completed. detail=*xxxx*: Cause code (information for vendor analysis) [Action] Re-execute the format flash operation command. If this message is still collected, the flash memory might be corrupted.			

No.	Event level	Event location	Message ID	Message text
	Description			
6	E3	ROM	02900004	`flash format system error(1). detail=xxxx`
	An error occurred during the initialization of the flash memory file system. `detail=xxxx`: Cause code (information for vendor analysis) [Action] Re-execute the `format flash` operation command. If this message is still collected, the flash memory might be corrupted.			
7	E3	ROM	02900005	`flash format system error(2). detail=xxxx`
	An error occurred during the initialization of the flash memory file system. `detail=xxxx`: Cause code (information for vendor analysis) [Action] Re-execute the `format flash` operation command. If this message is still collected, the flash memory might be corrupted.			
8	E3	ROM	02900013	`file system error.`
	The storage area for the flash memory configuration cannot be used. [Action] Try to execute the `format flash` operation command. If the error still occurs, the flash memory might be corrupted.			
9	E3	ROM	02900064	`FROM write fail [cnt=xxxxxxxx,size=xxxxxxxx,err=xxxxxxxx]`
	Writing to flash memory failed when executing the `ppupdate` or `restore` operation command. `cnt=xxxxxxxx`: Cause code (information for vendor analysis) `size=xxxxxxxx`: Cause code (information for vendor analysis) `err=xxxxxxxx`: Cause code (information for vendor analysis) [Action] Re-execute the `ppupdate` operation command (or, if the `restore` command was executed, re-execute the `restore` command). If the error still occurs, replace the switch.			

- E9 information

Table 2-57 Device-related E9 information when the event location is ROM

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	ROM	02900007	`flash write error. addr=xxxxxxxxx size=xxxx`
	An error occurred in an attempt to write to flash memory. `addr=xxxxxxx size=xxxx`: Detection location (information for vendor analysis) [Action] Re-execute the command. If the error still occurs, replace the device.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E3	ROM	02900008	`flash erase error. addr=`*xxxxxxxxxx* `size=`*xxxx*
	An error occurred in an attempt to erase the flash memory. `addr=`*xxxxxxx* `size=`*xxxx*: Detection location (information for vendor analysis) [Action] Re-execute the command. If the error still occurs, replace the device.			

2.6.2 Event location = RTC

The following tables describe device failure and event information when the event location is `RTC`.

- E3 information

Table 2-58 Device-related E3 information when the event location is RTC

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	RTC	0220012d	`Battery EMPTY`
	The device started when the RTC battery is 0 V (when the device is started 10 or more days after power to the device was turned off). [Action] Reset the time.			

- E9 information

Table 2-59 Device-related E9 information when the event location is RTC

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	RTC	022000c9	`Initialize Failure`
	An attempt to initialize the RTC failed. [Action] Use the `reload` operation command to restart the device.			
2	E9	RTC	0220012e	`Retry failure`
	An attempt to access the RTC failed. [Action] None.			

2.6.3 Event location = THERMO

The following tables describe device failure and event information when the event location is THERMO.

- E3 information

Table 2-60 Device-related E3 information when the event location is THERMO

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	THERMO	02300302	Accumulation operation time was initialized
	The accumulated operating time was reset to zero because the accumulated operating time was corrupted. [Action] None.			
2	E3	THERMO	02300304	Data of accumulation operation time fail
	The data for the accumulated operating time is corrupted. [Action] None.			
3	E3	THERMO	02300501	The temperature of hardware reached the warning level (<*temperature threshold*> degree).
	The temperature of the hardware has exceeded the temperature set by using the system temperature-warning-level configuration command. <*temperature threshold*>: Temperature (in degrees Celsius) set by using the system temperature-warning-level configuration command [Action] Because the temperature of the device reached the specified temperature, check the environment (for example, the status of the fan, ventilation, and heat sources around the device).			
4	E3	THERMO	02300502	The temperature of hardware came down from the warning level.
	The temperature of the hardware dropped below the temperature set by using the system temperature-warning-level configuration command by 3 degrees Celsius. [Action] None.			
5	E3	THERMO	02300503	The temperature logging can't be written.
	Writing of temperature logging information failed. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
6	E3	THERMO	02300504	`The average temperature of hardware reached the warning level. (<temperature> degree/<temperature threshold> degree <days> day(s))`
	The average temperature of the hardware exceeded the temperature set by using the `system temperature-warning-level average` configuration command. <*temperature*>: Average temperature of the device (in degrees Celsius) <*temperature threshold*>: Temperature (in degrees Celsius) set by using the `system temperature-warning-level average` configuration command <*days*>: Average temperature calculation period [Action] Because the average temperature of the device reached the specified average temperature, check the environment (for example, the status of the fan, ventilation, and heat sources around the device).			

- R7 information

Table 2-61 Device-related R7 information when the event location is THERMO

No.	Event level	Event location	Message ID	Message text
	Description			
1	R7	THERMO	02300601	`An environmental level became normal`
	The external temperature that was exceeding the threshold returned to normal. [Action] None.			

- E7 information

Table 2-62 Device-related E7 information when the event location is THERMO

No.	Event level	Event location	Message ID	Message text
	Description			
1	E7	THERMO	02300301	`Temperature exceeds the threshold`
	The external temperature exceeds the threshold. [Action] Check and improve the environment, such as the room temperature around the switches.			
2	E7	THERMO	02300303	`Temperature sensor re-try failure`
	The retry attempt by the temperature sensor failed. [Action] Use the `reload` operation command to restart the switch.			

No.	Event level	Event location	Message ID	Message text
	Description			
3	E7	THERMO	02300305	`Set Configuration Failure`
	Verification failed when setting the configuration to the temperature sensor register at the switch startup. [Action] Use the `reload` operation command to restart the switch.			

- E9 information

Table 2-63 Device-related E9 information when the event location is THERMO

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	THERMO	02300310	`Hardware is becoming high temperature which give damage to this system.`
	The hardware temperature has reached a temperature that is likely to critically damage device operation. [Action] 1. Check and improve the environment, such as ventilation and heat sources around the switches. 2. Check the fans. If a failure has occurred, replace the switch containing the faulty fan.			

2.6.4 Event location = SDCARD

The following tables describe device failure and event information when the event location is `SDCARD`.

- E3 information

Table 2-64 Device-related E3 information when the event location is SDCARD

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	SDCARD	02600191	`Not Support File System`
	Media for a file system other than FAT12 or FAT16 was inserted. [Action] Reformat the media by using either FAT12 or FAT16.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E3	SDCARD	026*xxxxx* other than the above	**All other cases**
	Messages other than those listed above might have been collected by the command-free maintenance functionality. Also see the manual *AX2500S and AX1200S Command-Free Maintenance Reference*.			

- E9 information

Table 2-65 Device-related E9 information when the event location is SDCARD

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	SDCARD	026000c9	`Create Device Fail`
	Generation of a memory card access device failed during initialization at the switch startup. [Action] Use the `reload` operation command to restart the switch.			
2	E9	SDCARD	026000ca	`Could Not Create Semaphore`
	Generation of a semaphore failed during initialization at the switch startup. [Action] Use the `reload` operation command to restart the switch.			
3	E9	SDCARD	026000cb	`Could Not Create Message Que`
	Generation of a message queue failed during initialization at the switch startup. [Action] Use the `reload` operation command to restart the switch.			
4	E9	SDCARD	026000cc	`Could not Create Task`
	Generation of a task failed during initialization at the switch startup. [Action] Use the `reload` operation command to restart the switch.			

2.6.5 Event location = FAN

The following tables describe device failure and event information when the event location is FAN.

- E3 information

Table 2-66 Device-related E3 information when the event location is FAN

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	FAN	02b00000	`FAN started by the system FAN control.`
	Fans were started by temperature monitoring. [Action] None.			
2	E3	FAN	02b00001	`FAN stopped by the system FAN control.`
	Fans were stopped by temperature monitoring. [Action] None.			

- R8 information

Table 2-67 Device-related R8 information when the event location is FAN

No.	Event level	Event location	Message ID	Message text
	Description			
1	R8	FAN	02b4000*n*	`FAN is normal.(n)`
	Fan startup (fault recovery) was detected. *n*: Fan number [Action] None.			

- E8 information

Table 2-68 Device-related E8 information when the event location is FAN

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	FAN	02b4000*n*	`FAN stopped.(n)`
	A fan error (failure) was detected. *n*: Fan number [Action] Replace the switch.			

2.6.6 Event location = LED

The following table describes device failure and event information when the event location is `LED`.

- E3 information

Table 2-69 Device-related E3 information when the event location is LED

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	LED	02500000	`Changed LED brightness : xxxx`
	The LED behavior has been changed. *xxxx*: LED operation setting (`normal`, `economy`, or `off`) [Action] None.			

2.6.7 Event location = SVP

The following tables describe device failure and event information when the event location is `SVP`.

- E3 information

Table 2-70 Device-related E3 information when the event location is SVP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E3	SVP	03900000	`SVP started.`
	SVP startup has been confirmed. [Action] None.			

No.	Event level	Event location	Message ID	Message text
	Description			
2	E3	SVP	03900001	SVP controller download succeeded.
	The update of the SVP controller ended. [Action] None.			

- E8 information

Table 2-71 Device-related E8 information when the event location is SVP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	SVP	03939000	SVP controller Version write error !!
	An attempt to write the SVP controller version failed. [Action] Replace the switch.			
2	E8	SVP	03939001	SVP controller download(SPI Tx) error !!
	An SVP error was detected. [Action] Replace the switch.			
3	E8	SVP	03939002	SVP controller download(SPI Write) error !!
	An SVP error was detected. [Action] Replace the switch.			
4	E8	SVP	03939003	SVP controller download(Health Check) error !!
	An SVP error was detected. [Action] Replace the switch.			
5	E8	SVP	03939004	SVP controller download(Unknown) error !!
	An SVP error was detected. [Action] Replace the switch.			

No.	Event level	Event location	Message ID	Message text
	Description			
6	E8	SVP	039390fn	SVP controller download(Fuse Write) error !!
	An SVP error was detected. The *n* identification code indicates the location where a writing failure occurred (bit MAP). *n*: 1 to 7 b1: ExFuse b2: FuseHigh b3: FuseLow b4: Reserved [Action] Replace the switch.			
7	E8	SVP	03939101	Error of SVP is detected.
	An SVP error was detected. [Action] Replace the switch.			

2.6.8 Event location = PWRSUP

The following table describes device failure and event information when the event location is PWRSUP.

- E8 information

Table 2-72 Device-related E8 information when the event location is PWRSUP

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	PWRSUP	03c3920F	Error of the power supply was detected.
	A power supply unit failure was detected. [Action] Replace the switch.			

2.6.9 Event location = PCI

The following table describes device failure and event information when the event location is `PCI`.

- E8 information

Table 2-73 Device-related E8 information when the event location is PCI

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	PCI	01c00001 01c10001 01c20001 01c30001	`Detect uncorrectable (NF) error(regInfo=`*xx*`).`
	A PCI bus error was detected (PCI bus failure). *xx*: Detection location (information for vendor analysis) [Action] Replace the switch.			

- E9 information

Table 2-74 Device-related E9 information when the event location is PCI

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	PCI	01c00002 01c10002 01c20002 01c30002	`Detect uncorrectable error(regInfo=`*xx*`).`
	A fatal PCI bus error was detected (PCI bus failure). If the `system recovery` configuration command is set, the switch restarts. *xx*: Detection location (information for vendor analysis) [Action] Replace the switch.			

2.6.10 Event location = RAM

The following table describes device failure and event information when the event location is RAM.

- E9 information

Table 2-75 Device-related E9 information when the event location is RAM

No.	Event level	Event location	Message ID	Message text
	Description			
1	E9	RAM	02a00000	`Detect multiple memory error(attr:xx,addr=xx,synd=xx).`
	A multiple memory error (ECC error) was detected. If the `system recovery` configuration command is set, the switch restarts. *xx*: Detection location (information for vendor analysis) [Action] Replace the switch.			
2	E9	RAM	02a00001	`Detect multiple bit error(attr:xx,addr=xx,synd=xx).`
	A multiple bit error (ECC2bit error) was detected. If the `system recovery` configuration command is set, the switch restarts. *xx*: Detection location (information for vendor analysis) [Action] Replace the switch.			
3	E9	RAM	02a00003	`Detect memory-select error(attr:xx,addr=xx,synd=xx).`
	A memory select error was detected. If the `system recovery` configuration command is set, the switch restarts. *xx*: Detection location (information for vendor analysis) [Action] Replace the switch.			

2.6.11 Event location = PS

The following tables describe device failure and event information when the event location is PS.

- R8 information

Table 2-76 Device-related R8 information when the event location is PS

No.	Event level	Event location	Message ID	Message text
	Description			
1	R8	PS	03e0000*n*	<*ps*> is normal.
	The displayed power unit is operating normally. <*ps*> displays the power unit (either PS or EPU) that is in a normal state. This message appears when the following conditions are met: 1. When the power unit state changes from an anomalous state to a normal state, or from an unimplemented state to a normal state, the power unit in the normal state is displayed. 2. When an EPU is removed for a power unit that is in a redundant configuration, PS in a normal state is displayed. 03e00001: PS 03e00002: EPU <*ps*>: PS or EPU [Action] None.			
2	R8	PS	03e00000	Power unit is mounted redundantly or mode changed.
	The power unit is in a redundant configuration. The operation mode was changed. [Action] None.			
3	R8	PS	03e00003	FAN of EPU is normal.
	The internal fan for an external power unit (EPU) is operating normally. [Action] None.			

- E8 information

Table 2-77 Device-related E8 information when the event location is PS

No.	Event level	Event location	Message ID	Message text
	Description			
1	E8	PS	03e0000*n*	<*ps*> is power off.
	The displayed power unit is off. <*ps*> displays the power unit (either PS or EPU) that is turned off. 03e00001: PS 03e00002: EPU <*ps*>: PS or EPU [Action] 1. Check the power switch, and turn it on. 2. Check the power cable connection and the power source, and then connect them properly. 3. Check the installation status of the external power unit (EPU).			
2	E8	PS	03e00000	Power unit isn't redundantly mounted.
	The power unit is not in a redundant configuration. [Action] Check the status of the power unit. If the power unit is not in a redundant configuration, configure no power redundancy-mode with a configuration command.			
3	E8	PS	03e00003	Stop is FAN of EPU.
	The internal fan of an external power unit (EPU) for a redundant configuration has stopped. [Action] Replace the connected external power unit (EPU).			

Index